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FEATURING

SECRET OF ANTON YORK

A Novel of the Last World
By EANDO BINDER

A THRILLING PUBLICATION

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With HOME RECORDO you can make a record of your singing, talking, reciting or instrument playing right in your own home, too! No longer need the high prices of recording machines or studio facilities prevent you or your family or friends from hearing their own voices or playing. No experience necessary. No "mike" fright to worry about. No complicated gadgets. In a jiffy you can set up HOME RECORDO, play or sing or talk, and immediately you have a record which you and your friends can hear as often as you wish.

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and other famous orchestra leaders use
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YOU TOO CAN MAKE RECORDS RIGHT IN YOUR OWN HOME

Everything is included. Nothing else to buy and nothing else to pay. You get complete HOME RECORDING UNIT, which includes special recording needle, playing needles, 6 two-sided unbreakable records. Also spiral feeding attachment and combination recording and playback unit suitable for recording a skit, voice, instrument or radio broadcast. ADDITIONAL, 2-SIDED BLANK RECORDS COST ONLY 75c per dozen.



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Accountancy Home-Study

made interesting and practical thru problem method

YOU know as well as we do that Accountancy fits many men for positions that pay three and five and ten thousand dollars a year—gives many other men unusual opportunity to start a profitable growing business of their own.

You probably realize also that—because of the new state and federal legislation—the accounting profession faces now and for the next few years the greatest opportunity it has ever had.

The only question is—just how practical is it for *you* to train yourself adequately in Accountancy through home study?

And the answer lies in the LaSalle Problem Method.

For this modern plan of training not only makes Accountancy study at home thoroughly practical but makes it interesting as well:

And here's how:

You Learn by Doing

Suppose it were your privilege every day to sit in conference with the auditor of your company or the head of a successful accounting firm. Suppose every day he were to lay before you in systematic order the various problems he is compelled to solve, and were to explain to you the principles by which he solves them. Suppose that one by one you were to work those problems out—returning to him every day for counsel and assistance.

Granted that privilege, surely your advancement would be faster by far than that of the man who is compelled to pick up his knowledge by study of theory alone.

Under the LaSalle Problem Method you pursue, to all intents and purposes, that identical plan. You advance by solving problems.

Only—instead of having at your command the counsel of a single individual—one accountant—you have back of you the organized experience of a great business.

ness training institution, the authoritative findings of scores of able accounting specialists, the actual procedure of the most successful accountants.

Thus—instead of fumbling and blundering—you are coached in the solving of the very problems you must face in the higher accounting positions or in an accounting practice of your own. Step by step, you work them out for yourself—until, at the end of your training, you have the kind of ability and experience for which business is willing and glad to pay real money—just as it was glad to pay these men.

Five Men Who Tested and Proved It for You

For instance, there was the man who started Accountancy training with us in 1916. After a short period of study, he took a position as bookkeeper for a year, and then became accountant for a leading automobile manufacturer—with two bookkeepers under him. He became auditor of one of the foremost banks in his state with a salary 325 percent larger than when he started training.

He wrote, "My training is the best investment I've ever made, showing a cash value running into five figures."

And the young clerk, earning \$75 a month eleven years ago and later getting many times that as general auditor for an outstanding, nation-wide organization. Within six months after he began our training, he was earning \$125 a

month and within four years, he was earning \$250.

Do you wonder that he wrote, "While LaSalle ads once seemed like fairy tales to me, now I know from personal experience that they are true."

Or let us tell you about two men—one a stenographer and the other a retail clerk—neither of whom knew more than the simplest elements of bookkeeping. One became the comptroller and the other the assistant comptroller of a large company.

"LaSalle training in Higher Accountancy," wrote both, "was the important factor in our rapid climb."

And if you are thinking about the C.P.A. degree and a public accounting business of your own, read about the pharmacist who was earning \$30 a week some years ago when a LaSalle registrar secured his enrollment for Accountancy training. Eight months later he left the drug store to take a bookkeeping job at \$20 a week—less money but larger opportunity. Three years later he passed the C.P.A. examination and a year later yet he was earning \$5,000 a year. Now he has his own highly successful public accounting firm for which he says, "My LaSalle training has been largely responsible."

One-Tenth of All C. P. A's Are LaSalle Trained

If you want still more proof, remember that over 1800 C.P.A.'s—approximately one-tenth of all those in the United States who have ever passed the difficult examination for this coveted degree—are LaSalle alumni.

And knowing these facts, ask yourself if there can be any further question about the practicability of this training for you—ask rather if the real question is not about the size of your own ambition and the quality of your determination.

For Accountancy is no magic wand for the lazy or the fearful or the quitter—it offers success only to the alert adult who has the courage to face the facts and the will to carry on till the job is done.

If you are that individual, the coupon below, filled out and mailed, will bring you free the information that may open up to you the future of which you have dreamed—ability and income and success.

Is it not worth getting that information?



*Names and addresses given on request.

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Address.....

Position.....

City.....

Age.....



SCIENTIFICTHON'S LEADING MONTHLY

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STORIES

The Magazine of Prophetic Fiction



Vol. XVII, No. 2
August, 1940

IN NEXT
MONTH'S ISSUE

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A Complete Novel of
the Planet Patrol

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THE TYRANT OF MARS

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Bondage

By
FREDERIC ARNOLD
KUMMER, JR.

FORMULA FOR LIFE

A Novelet of
Microbe Menace

By
MAX C. SHERIDAN

THE COMEDY OF ERAS

A Humorous Pete
Manx Story

By
KELVIN KENT

and many others

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• ON THE COVER

The cover painting by Howard V. Brown depicts a
scene from Henry Kuttner's short story, NO MAN'S
WORLD.

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PRINTED IN THE U. S. A.

I Jumped My Pay from \$18 to \$50 a Week!

Here's how I did it

by S. J. E.
(NAME AND ADDRESS
SENT UPON REQUEST)



"I had an \$18 a week job in a shoe factory. I'd probably be at it today if I hadn't read about the opportunities in Radio and started training at home for them."



"The training National Radio Institute gave me was so practical I was soon ready to make \$5 to \$10 a week in spare time servicing Radio sets."



"When I finished training I accepted a job as serviceman with a Radio store. In three weeks I was made service manager at more than twice what I earned in the shoe factory."



"Eight months later N. R. I. Employment Department sent me to Station KWCR as a Radio operator. Now I am Radio Engineer at Station WSUI. I am also connected with Television Station WSKX."

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The day you enroll, I start sending you Extra Money Job Sheets which start showing you how to do Radio repair jobs. Throughout our Course I send plans and directions which have helped many make \$200 to \$500 a year in spare time while learning. I send special Radio equipment to conduct experiments and build circuits. This 50-50 training method makes learning at home interesting, fascinating, practical. I ALSO GIVE YOU A MODERN, PROFESSIONAL ALL-WAVE SET SERVICING INSTRUMENT to

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Dept. OH09, National Radio Institute,
Washington, D. C.

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Age.....

Name

Address

City

State.....

Radio broadcasting stations employ engineers, operators, technicians. Radio manufacturers employ testers, inspectors, foremen, servicemen in good-pay jobs. Radio jobbers, dealers, employ installation and servicemen. Many Radio Technicians open their own Radio sales and repair businesses and make \$30, \$40, \$50 a week. Others hold their regular jobs and make \$5 to \$10 a week fixing Radios in spare time. Automobile, Police, Aviation, Commercial Radio; Loudspeaker Systems, Electronic Devices are other fields offering opportunities

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This is a call for men everywhere to handle
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Forty years ago the horse and buggy business was supreme—today almost extinct. Twenty years ago the phonograph industry ran into many millions—today practically a relic. Only a comparatively few foresighted men saw the fortunes ahead in the automobile and the radio. Yet irresistible waves of public buying swept these men to fortune, and sent the buggy and the phonograph into the discard. So are great successes made by men able to detect the shift in public favor from one industry to another.

Now another change is taking place. An old established industry—an integral and important part of the nation's structure—in which millions of dollars change hands every year—in thousands of cases being replaced by a truly astonishing, simple invention which does the work better—more reliably—AND AT A COST OFTEN AS LOW AS 2% OF WHAT IS ORDINARILY PAID! It has not required very long for men who have taken over the rights to this valuable invention to do a remarkable business, and show earnings which in these times are almost unheard of for the average man.

Not a "Gadget"— Not a "Knick-Knack"—

*But a valuable, proved device which
has been sold successfully by business
novices as well as seasoned
veterans.*

Make no mistake—this is no novelty—no flimsy creation which the inventor hopes to put on the market. You probably have seen nothing like it yet—perhaps never dreamed of the existence of such a device—yet it has already been used by corporations of outstanding prominence—by dealers of great corporations—by their branches—by doctors, newspapers, publishers—schools—hospitals, etc., etc., and by thousands of small business men. You don't have to convince a man that he should use an electric bulb to light his office instead of a gas lamp. Nor do you have to sell the same business man the idea that some day he may need something like this invention. The need is already there—the money is usually being spent right at that very moment—and the desirability of saving the greatest part of this expense is obvious immediately.

Some of the Savings You Can Show

You walk into an office and put down before your prospect a letter from a sales organization showing that they did work in their own office for \$11 which formerly could have cost them over \$200. A building supply corporation pays our man \$70, whereas the bill could have been for \$1,600! An automobile dealer pays our representative \$15, whereas the expense could have been over \$1,000. A department store has expense of \$38.60, possible cost if done outside the business being well over \$2,000. And so on. We could not possibly list all cases here. These are just a few of the many actual cases which we place in your hands to work with. Practically every line of business and every section of the country is represented by these field reports which hammer across dazzling, convincing money-saving opportunities which hardly any business man can fail to understand.

Profits Typical of the Young, Growing Industry

Going into this business is not like selling something offered in every grocery, drug or department store. For instance, when you take a \$7.50 order, \$5.83 can be your share. On \$1,300 worth of business, your share can be \$1,167.00. The very least you get as your part of every dollar's worth of business you do is 67 cents—on ten dollars' worth \$6.70, on a hundred dollars' worth \$67.00—in other words two thirds of every order you get is yours. Not only on the first order—but on repeat orders—and you have the opportunity of earning an even larger percentage.

This Business Has Nothing to Do With House to House Canvassing

Not do you have to know anything about high-pressure selling. "Selling" is unnecessary in the ordinary sense of the word. Instead of hammering away at the customer and trying to "force" a sale, you make a dignified, business-like call, leave the installation—whatever size the customer says he will accept—at our risk, let the customer sell himself after the device is in and working. This does away with the need for pressure on the customer—it eliminates the handicap of trying to get the money before the customer has really convinced himself 100%. You simply tell what you offer, showing proof of success in that customer's particular line of business. Then leave the invention without a dollar down. It starts working at once. In a few short days, the installation should actually produce enough cash money to pay for the deal, with profits above the investment coming in at the same time. You then call back, collect your money. Nothing is so convincing as our offer to let results speak for themselves without risk to the customer! While others fail so get even a hearing, our men are making sales running into the hundreds. They have received the attention of the largest firms in the country, and sold to the smallest businesses by the thousands.

EARNINGS

One man in California earned over \$1,600 per month for three months—close to \$5,000 in 90 days' time. Another writes from Delaware—"Since I have been operating (just a little less than a month of actual selling) and not the full day at that, because I have been getting organized and had to spend at least half the day in the office; counting what I have sold outright and on trial, I have made just a little in excess of one thousand dollars profit for one month." A man working small city in N. Y. State made \$10,805 in 9 months. Texas man nets over \$300 in less than a week's time. Space does not permit mentioning here more than these few random cases. However, they are sufficient to indicate that the worthwhile future in this business is coupled with immediate earnings for the right kind of man. One man with us has already made over a thousand sales on which his earnings ran from \$5 to \$60 per sale and more. A great deal of this business was repeat business. Yet he had never done anything like this before coming with us. That is the kind of opportunity this business offers. The fact that this business has attracted to it such business men as former bankers, executives of businesses—men who demand only the highest type of opportunity and income—gives a fairly good picture of the kind of business this is. Our door is open, however, to the young man looking for the right field in which to make his start and develop his future.

No Money Need Be Risked

In trying this business out, you can measure the possibilities and not be out a dollar. If you are looking for a business that is not overhyped—a business that is just coming into its own—on the up-grade, instead of the down-grade—a business that offers the buyer relief from a boresome, but unavoidable expense—business that has a prospect practically in every office, store, or factory into which you can set foot—regardless of size—that is a *necessity* but does not have any price cutting to contend with as other necessities do—that because you control the sales in exclusive territory, is your own business—that pays more in some individuals than many men make in a week-end sometimes in a month's time—if such a business looks as if it is worth investigating, get in touch with us at *our* for the rights in your territory—don't delay—because the chances are that if you do wait, someone else will have written to us in the meantime—and if it turns out that you were the better man—we'd both be sorry. So for convenience, use the coupon below—but send it right away—or wire if you wish. But do it now. Address

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BEFORE



AFTER



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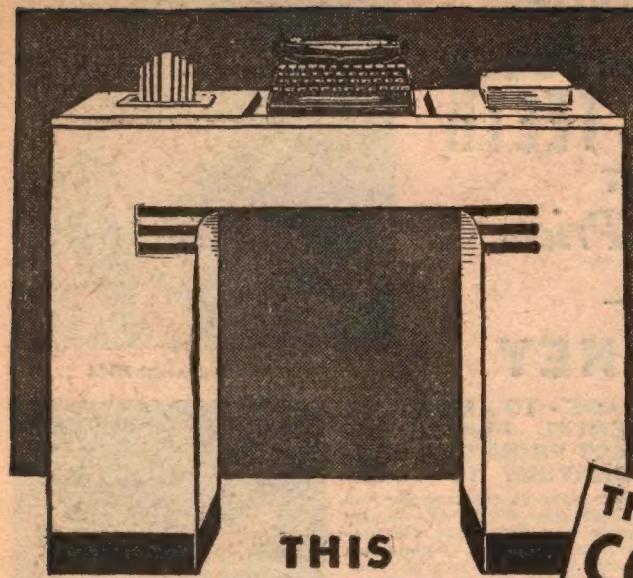
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- How to Attain Happiness in Marriage
- How You Can Win Mastery Over Others
- How to Break the Shackles of Fear
- How You Can Direct Your Personal Forces
- How to Make Each Daily Act Successful
- How the Power of Thoughts Can Be Turned into Actual Assets
- How to Retain Youthfulness of Spirit, Actions and Deeds
- How Your Visions Can Be Turned into Actual Accomplishments
- And scores of other subjects too numerous to mention



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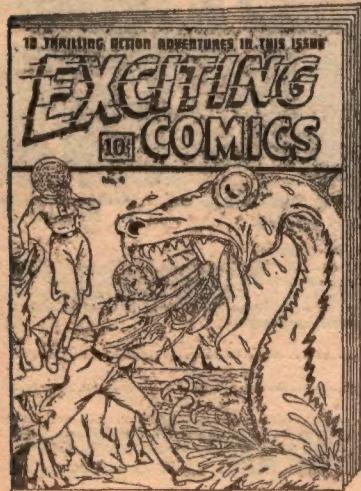
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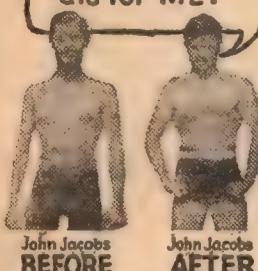
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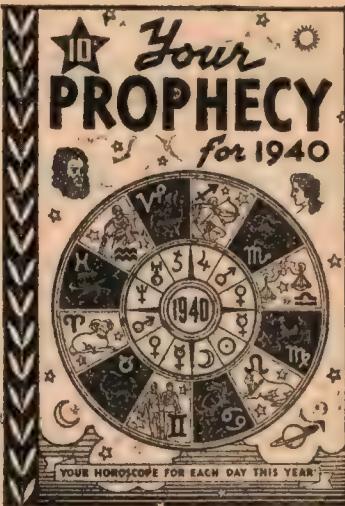
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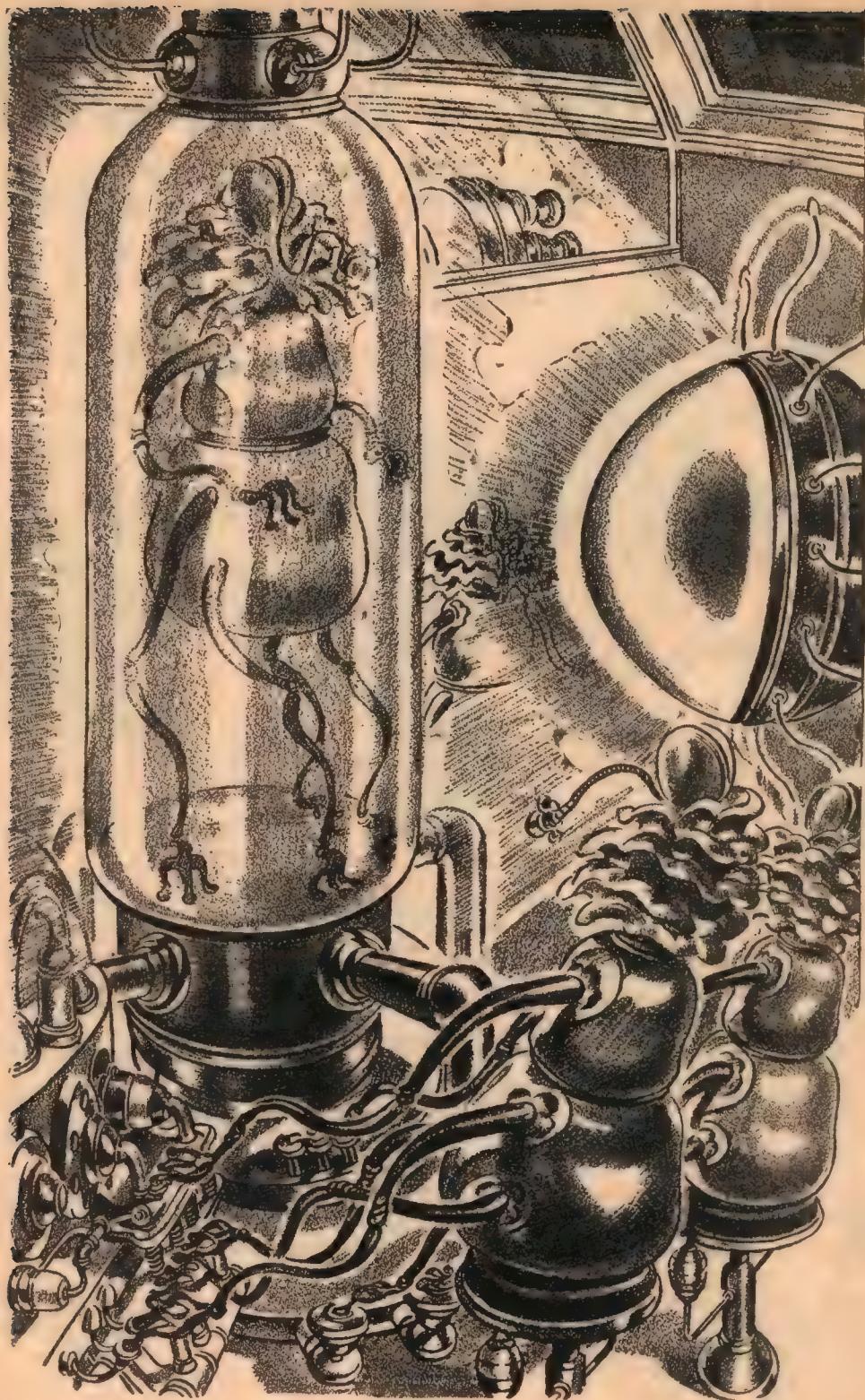
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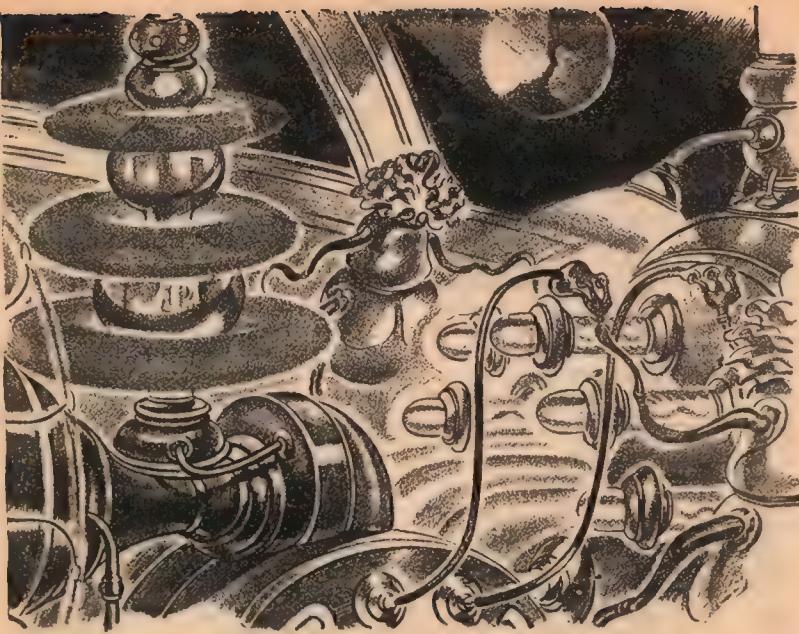
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"I am ready," Uoi said. "Seal the cylinder and turn on the transference rays"



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THERE WAS NO PARADISE

By MANLY WADE WELLMAN

Author of "Twice in Time," "Battle in the Dawn," etc.

The Man From Mars Had the Midas Touch But Gold Couldn't Buy the Things He Wanted!

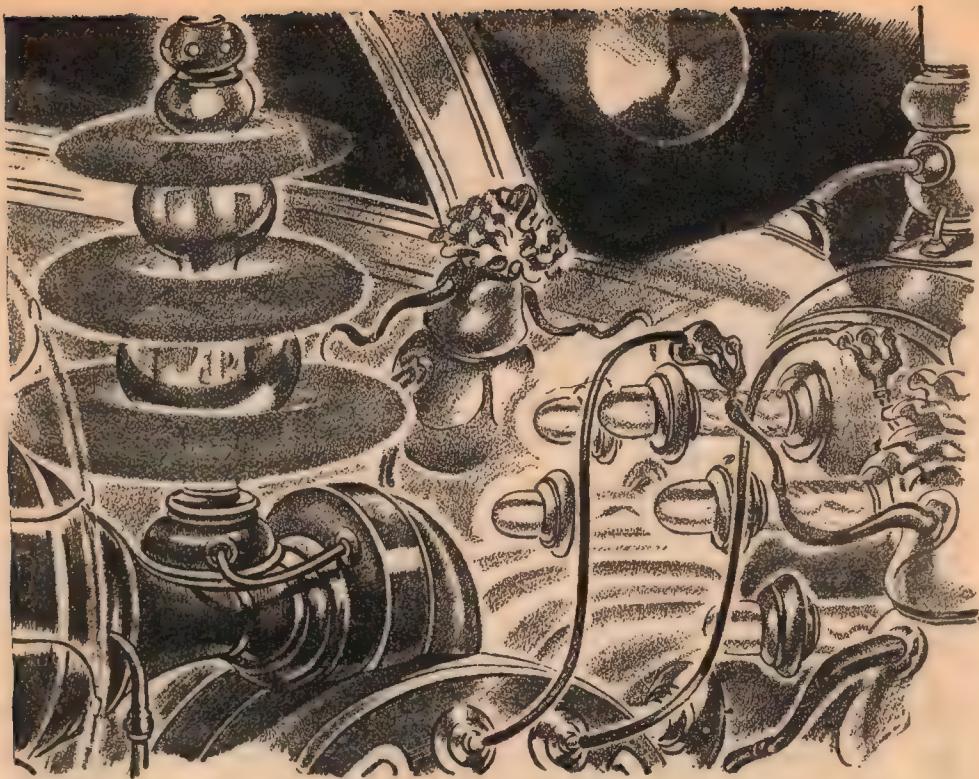
CHAPTER I

The Coming of Uoi

THE windowless gray room was overcrowded. Fifty men and more sat in rows of chairs. Rakish, watchful men, with pencils and pads of paper. They were reporters.

"Here he comes," whispered one. And here he certainly came, between two uniformed guards, the warden ahead and a muttering priest behind. He was the tallest and handsomest man any of them had ever seen, even though he wore shapeless prison shoddy and his high skull was shaven. Though intent and alert, he had no appearance

A COMPLETE INTERPLANETARY NOVELET



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of worry. His color was good, and his step firm.

He sat in the great chair of massive wood and allowed the guards to strap down his wrists and ankles, fit an electrode to his shin. The executioner's hands trembled—they always did—as he lowered the bowl-like cap upon the razored head. And the man who was to die smiled as if in mockery.

For once, the warden felt called upon to make a speech.

"Joe Marks, you are about to expiate by your own death the crime of murder. Have you anything to say?"

The shapely lips of Joe Marks moved. His voice came clear and careless.

"Only that I wish you would hurry."

The warden nodded to the executioner, who stepped toward the great switch that was clamped to the rear wall.

"What's Joe Marks thinking of?" muttered a reporter to his neighbor. "I'd give a month's pay to know. . . ."

The individual called Joe Marks remembered his last conference with his three colleagues in their distant home. He remembered the glass-roofed observo-laboratory. Its walls were a round curve of polished metal, its concrete floor crowded with the massed assortment of scientific equipment with which the four of them worked.

On that occasion he had placed himself in a metal-mounted cylinder of transparent material. Nervelike wires and coils attached it to the great ray-machine that stood nearby. The octopoid figures helped him in with their six supple tentacles. Their bodies were bladderlike, their craniums tufted with petallike tags of flesh that housed their senses.

"Uoi," said one. No Earth-born ear could have heard the voice, which was no more than a thought impulse. "You understand perfectly the adventure that will befall you?"

This was mere formality, and Uoi made reply in the same spirit.

"I will let myself be sealed herein, and you will employ the three transference rays in succession. My body will remain preserved in this cylinder. But my consciousness will be transferred far across space to the third world, which shines green in our sky—"

THE others fluttered exultantly. The thought was still a thrill to them. Living on the starved desert world that holds the fourth orbit around the Sun, the world called Mars by Terrestrials, they knew no other romance than this. But that romance stirred them whenever they thought of or studied the Green World which is called Earth by its natives.

"I envy you, my friend Uoi," said a second of the group. "To reach that paradise of green, with all its wealth of oxygen and water and life— To see and know and exchange thoughts with its magnificent dwellers!"

"They must have changed, those dwellers, during the last age," put in the first who had addressed Uoi. "Our remote-control pictures with their sound records, were made fully twelve hundred years ago. That is more than twenty-five hundred of the years of the Green World. What those far folk were then—"

"That was but a small beginning of the noble beings they must have become," broke in Uoi confidently.

It was logical, natural, the claim he made. For years he had studied the ancient films, taken by the lost mechanical and astronomical devices of his better equipped ancestors. He had observed the white temples and glittering palaces of a beautiful race of bipeds, who lived by a blue ocean in a city called Athens. Even the language on the sound records had at last been learned by the sheer prolonged rationalization of generations of Martian students.

He had watched the Olympic games, the glorious overthrow of foreign oppressors, had heard the philosophy of Socrates and Plato, the dramas of Euripides and Aristophanes. If this had been the Green World so long ago, into what unbelievable perfection had it since blossomed?

"I will be humble," he promised himself and his friends. "I will go softly among those great strangers. I will learn and bring back their lessons of courage, loyalty, their sense of beauty and laughter. We are a poverty-stricken people. We have slid back as they have gone forward. But I will show them that we can ad-

mire and appreciate. And because of their kindness and understanding, they will call us their brothers, their friends."

There were final instructions for him to attend. The third Martian scientist now addressed him.

"Uoi, my own work has just completed itself. I have focused my atom-controls on that far Green World and have searched out the proper organic substances, in right proportions and combinations. When your consciousness is reflected thither, I shall at the same moment bring together my vaporent materials. They will merge into a body, with appearance, organic construction and metabolism such as we know those peoples to have. Thus you will seem similar to them, and your wits will teach you to act like them."

"How better could an intelligent being act than like them?" Uoi demanded earnestly. "I am ready."

"Getting your consciousness back into your own body will be harder," continued his colleague. "But that body, being artificial, can be disintegrated if powerfully attacked by disintegrating forces such as, doubtless, you can arrange. It will take a tremendous outpouring of power. When my cohesive currents are neutralized by a strong counter-current, the molecules of that synthetic body will scatter into nothing. You will return to us and report."

"I am ready," Uoi repeated. "Seal the cylinder and turn on the transference rays."

They did so.

Sitting in the electric chair where he was to die for murder, the Martian masquerading as Joe Marks remembered the ensuing moment of confusion. He recalled his seeming jerk down an immense dark tunnel, and then his wakening—into a universe of brilliance and commotion and dreadful noise. . . .

* * *

ONE animal roar dominated all the rest of the confused racket of grinding machinery, shrill voices, footfalls, and scores of less identifiable sound-sources. Uoi glanced up at the moving pink blobs that must be faces.

He found that he sat or sprawled on hard, dry stone—concrete rather.

He drew himself erect. His body was bipedal—that is the new body that had been formed for him by the remotely controlled science of his colleagues. He was a fellow-creature to the beings that now pressed and jostled in a close circle around him. These were the beings he had learned to recognize from those ancient pictures—

But no, these were caricatures, grotesqueries! They had not the swelling muscles of the Athenian males, the gracious curves of the females he had studied. These specimens were all scrawny, or lopsided, or grossly corpulent.

He quickly saw such items as squint eyes, wry mouths, low craniums. The skins were coarse or pimply or pallid. In the case of the females, they were ruddied over with garish artificial colors. The flaccid bodies and feeble limbs were all covered with strangely fitted pieces of fabric, as though to hide their imperfections. Where was he, Uoi wondered—in a howling pen where all the mistakes of the race were herded?

"Hey!" The howl was repeated.

Uoi looked toward the source. A huge, powerfully built creature was pressing close to him. It was male, tallest and biggest of all the herd, almost as tall in fact as Uoi's new-found synthetic body. It wore dark blue, with a round visored cap and a great silvery tag of metal on its chest. Its heavy face was red and angry.

"Well, Mista Septemba Mawn," went on its bitter challenging voice. "What makes ya tink ya can come out on da public streets widout nothin' on?"

Uoi understood, somewhat. He had gazed around enough to learn that he was in no pen or cage. He stood on a pavement in the midst of a lofty-towered city, which glowed with many moving and blinking lights for all that it was night. A long rectangle of black metal, pegged up on a post, described the place as Broadway and Times Square. He understood that, too, being a Martian and geared mentally to grasp strange things. He ventured to address his harsh questioner.

"You mean, I should be covered with woven fabric, like you?" His strange vocal organs worked slowly but surely, as he divined and effected their use. "It is a custom I do not know. I have only arrived, you see."

"Oh, yeah?" spat the monster in blue. "Clo'es is sumpin new, is dey? I suppose ya come here from Mars or some place?" He roared with loud, mirthless laughter at the joke. "Tell it to da marines, but not to da cops!" Big, blue-clad arms waved the staring crowd back. "Gimme room, youse. Here's da wagon."

A great, black parallel epiped on wheels drew up, and a door clanked open. Another blue-dressed man emerged, with a drab blanket. This he flung around Uoi's naked torso.

"C'mon!" the first bluecoat ordered him, and gave him a shove toward the vehicle.

"Oh, you are taking me away—hospitality?" suggested Uoi. "Many thanks."

HE entered the patrol wagon. Its stuffy smell was a shock to his new nose. There was a rumble, a jouncing motion, for some moments. Then he was led out and into a building of filthy gray stone. Down a corridor he was herded, to where another bluecoat accosted him from behind a desk.

"Wot's ya name?"

"My name? Uoi." And he thought of the word that his first questioners had unthinkingly used. That was the name of the place whence he had come. "Mars—" he began, then broke off, wondering how to explain to so plainly limited an individual.

"Joey Marks," repeated the creature at the desk, and wrote it down. "Height? Mmmm. About six-two. Weight? I say, one hundred ninety. Blond hair, blue eyes. Well, Joey, what address? What occupation?"

Uoi still paused. Brief as his first experience had been, it was enough to show him that these strange, emphatic folk of the Green World might not understand. He had better wait for a scientist. One would surely come soon. Until then—

"I can't exactly say," he temporized. "What's the idee parading 'round

naked?"

Uoi shook his head. "It happened suddenly. I just found myself there."

The desk sergeant looked at the big one who had arrested Uoi. He lifted a sausagelike finger and tapped his own narrow forehead.

"Lost his grapes," he pronounced. "Aneemya — amneszya — whachucall it. Better call the doc."

Uoi found himself waved into a room that was white-washed and smelled sharply of antiseptic. A barred door clicked shut behind him. Studying the lock, he saw that it was primitive. An infant Martian could open it without key or other tools. But he was content to wait, his blanket across his arm, until a new individual entered.

This one was lean and stooped, with gray bristly hair, brown rough clothing. His immense gleaming eyes on second examination proved to be big lenses fitting over organs that must be woefully weak.

"I'm Doctor Dumble," the newcomer introduced himself. "You remember your name, Joe Marks. But the rest is rather hazy, eh?"

The words told Uoi something.

"You are a doctor. That means a scientist?"

"Scientist? Yes, I guess so."

"Then, Doctor Dumble, you will understand," began Uoi gratefully. "It needs the scientific mind to grasp my story. Not many moments ago, my colleagues and I, situated on the planet you call Mars—"

"What's this, what's this?" shouted Dr. Dumble. He stared with wide eyes. Putting out his fingers, he touched Uoi's pulse, then twitched up Uoi's right eyelid. He stared again.

"Hard to diagnose," he mumbled. "You're a fine physical specimen, Mr. Marks. Must be a championship athlete. I can't find any pathological condition there. But to imagine you have been on Mars—Heavens, man, do you know what that means?"

"I ought to know," replied Uoi with even emphasis. "I have just made the journey. You seem not to believe me, Doctor Dumble." He took an ominous step forward. "It is not good for one to think that true stories are lies."

Dumble retreated shakily.

"Don't get violent!" he cried pitifully.
"Help! Help!"

CHAPTER II

Earth's Nicest People

THE barred door burst open and three bluecoats rushed in. Among them was the big one who had arrested Uoi.

"Trouble, hey?" he growled with relish. "Gittin tough, is he Doc?"

Advancing on Uoi, he lifted a short club of some elastic material.

"Do not try to strike me," warned Uoi quickly.

Then, as the other charged, he ducked the blow with easy speed. He shot out his own hand and caught the arm that wielded the weapon. A jerk and a twist—The bluecoat howled with pain and Uoi felt the bone snap. His synthetic body was stronger by far than he had dreamed.

The other two were pointing metal devices that had tubular muzzles, much like the ancient weapons in Martian museums.

Again Uoi ducked. Swift as thought, not quite as swift as light, he bobbed too swiftly for the explosion-driven lumps of lead from those weapons to hit him. They thudded into the white-washed wall behind him.

He closed in, easily snatching the guns away. One of the men screamed and ran. The other tried to fight with his fists. Uoi slapped him down open-handed. Then he turned to the doctor.

"I thought you were a scientist," he said. "But I see that you are only a fool."

"D-don't hit me!" quavered Dr. Dumble.

"Why should I? You cannot hurt me." Uoi stepped to the man whose arm he had broken. He had fainted. Quickly, knowingly, Uoi stripped away the fellow's blue uniform and clumsy black shoes. He put them on himself. "Since this is customary," he commented, "I shall wear the things of Earth men. Good-by, fool who calls himself a scientist."

His flashing fingers, incredibly

swifter than normal human members, had done all these things within seconds. He was fully clad when other bluecoats jammed the door. But he charged through them unhesitatingly, and almost effortlessly.

A moment later he was out of the building, around a corner and running down a dark side street. He heard noise behind him, shouting voices and heavy feet.

"Halt!" came a command.

The fierce creatures called cops still pursued him. Regretfully he turned, and the blue cloud closed around him. He felt a rain of blows, ineffectual against his superb synthetic body. Someone was trying to clamp a metal shackle on his wrist. With back-handed clouts and sudden shoves he sent his assailants sprawling in all directions.

One of them rose on an elbow, fired a weapon. Uoi felt the flick of fire that grazed his cheek and recognized that here was real danger.

A hole yawned in the dimness against a wall. He sprang into it, down a flight of stairs to a door. Other shots flashed above him. He raised a fist to smash the door. But another panel, brick-faced, slid away beside him.

"Dodge in here," said a quick, soft voice. "Cop-fighters are always welcome. Quick!"

Uoi obeyed. The panel closed behind him.

"It's part of the wall," announced his befriendier. "They'll dash down, kick in the door to the next cellar—find nothing. Hey, you look like a cop yourself."

"I wear only the blue clothes," explained Uoi.

He found time to study his dimly-lighted surroundings and the owner of the soft voice.

SH~~E~~ was a female, tall, with wavy black hair. She wore gay fabrics, a jacket of fur, and uncomfortable looking footgear with stiltlike pegs under the heels. But Uoi's scientific eye judged that under all this strange disarming garb would be a magnificently organized body, even such as the ancient films had depicted. So there were splendid creatures, after all! He had escaped from one faction, vicious and stupid, to another, handsome and un-

doubtedly enlightened.

"You are beautiful," he stated authoritatively.

Her pale, fine-featured face smiled.

"Go slow, chum," she warned in the soft voice he found increasingly pleasant. "You're not so rotten-looking yourself. But I'm spoken for, by a certain gent named Gil Scalotti. Know him? Well, he's a boss mobster, quick on the trigger. He hates competition in business or pleasure. Come along and meet him."

They went up a flight of wooden steps. The tall, handsome female introduced herself as Dulcey Van Tyl, late of an organization called the Vanities. Uoi was inspired to give for himself the name already garbled by the bluecoats into Joey Marks.

On the floor above, they came into a room with soft lights and highly cushioned furniture. Around a table sat five males in eccentrically tailored clothes. They were all pallid-faced, hard-eyed, nervous.

As Dulcey Van Tyl led in Uoi, they were at some game with pictured bits of cardboard, for a prize of crumpled green papers in the center. These cards they hastily laid down. Five right hands dived under coats. They snatched out the primitive fire-weapons that Uoi began to think were regulation equipment on this Green World. Professional and organized crime, outmoded for so many ages on Mars, did not even enter his mind as a possibility.

"Easy, boys," said Dulcey Van Tyl quietly. "We can use a cop-fighter like this guy. He stole that uniform. From our lookout in the cellar, I saw him lick a whole squad bare-handed. Meet Joey Marks."

The leading spirit of the gang, gaunt, swarthy and sharp-faced, rose and held out his slim, hard hand.

"Pleasure, Joey," he said, with a voice like the grate of defective gears. "I'm Gil Scalotti. If you're a real muscle guy like Dulcey says—"

"She whom you call Dulcey spoke truth," Uoi assured him. "It is surprising to find so much hesitation over honest statements. I do not admire the blue-dressed men you call cops, and you seem to feel the same way."

Loud applause greeted that senti-

ment. Uoi hoped he was among friends at last, but decided to proceed slowly with the truth about himself. First he would make his position solid.

"In what way can I help you?" he asked.

The five men and Dulcey stared at him.

"Well, Joey," said Gil Scalotti. "What's your talents besides roughhousing?"

"My science seems to be far ahead of most," offered Uoi.

"Maybe he knows how to make gold," suggested one of the group,

The others laughed. But Uoi nodded at once.

"Gold—you mean the heavy yellow metal?" He walked briskly across the floor to where hung a lamp bracket, a fake antique. "Ah," he went on, "this is of a leaden alloy. It will serve. And these other lights, they are electric?"

"Of course they're electric," Scalotti replied harshly. "You think we're living in the Gay Nineties? Making jokes, Joey?"

"I'm making gold," Uoi corrected him.

ALL gaped while he detached the connection from the leaden lamp bracket. He parted the two terminals, then brought them together and judiciously produced sparks. The current he found to be far weaker than anything the Martains used, but it was steady.

Finally he struck the delicate outpouring of power he wanted. He caught up a drinking-glass from the table and held it to his spark stream. The glass glowed, changed form. Dulcey was frightened, and one of the men swore wonderingly. Within less than a minute, Uoi had converted the glass into a thick, clear lens, in which danced light-points of many colors.

"Now to sort out the proper atom-shifting rays," he lectured, more to himself than the onlookers.

He held the lens near a ceiling bulb, concentrating a beam of green-blue upon the leaden fixture. The metal seemed to quiver and throw off vapors. Uoi skilfully shifted his strange light from one point to another. Presently he paused, lowering his lens.

"Gold," he said.

Scalotti had put a cigar in his mouth. Now he bit it almost in two. He crossed the room and stared at the fixture.

"What kind of hokus-pokus you been doing here?" he demanded.

"The proper atom-shifting rays," Uoi repeated. "Simple, with a proper lens and treatment. Had I adequate apparatus—But this metal is preponderantly gold."

Scalotti's bright eyes were baffled slits.

"If you're being funny—"

"I am not being funny. I stake my scientific reputation that this metal will assay more than three-fourths gold."

"Dave," Scalotti growled at one of his men. "Unscrew that thing and run out to Higginbotham. You know, the fence. If he says it's gold, okay. If he says it ain't, then—" And he glared at Uoi.

Dave obeyed. All the time he was gone there was no sound in the room, and very little motion. A long while later, Dave returned. He put something on the table—a packet of green-bordered bills, fastened with a rubber band.

"It was gold," he said breathlessly. "Higginbotham paid me!"

Scalotti almost sprang at Uoi, grinning like a welcoming father.

"Joey," he cried, "I had you wrong. You got something, kid. You call it science but I call it magic. You're going to be a big help to us."

It developed that Scalotti and his associates owned and occupied that particular building as home and headquarters. Uoi was given a bedroom on an upper floor. Dulcey was the last to bid him good night.

"If there's anything you want, Joey—" she said, and paused expectantly.

"I will decide later," he told her. He met the direct, searching impact of her deep black eyes with his blue ones.

"You said I was beautiful," she reminded.

"And so you are," he agreed casually. Scalotti called up the stairs for Dulcey and she hurried away.

Alone, Uoi peeled off the uncomfortable blue clothing he had stolen. He arrayed himself carelessly in a sheet that fell into folds like the garb of the ancient Athenians. He had much to think about before resting.

THESE new creatures were friendly, though shallow of understanding. He hoped for better relationships to come. In any case, they had sheltered him from those riotous beings called cops. They had assured him that anyone who fought cops had their approval. Uoi extended the logic of that assurance. The cops, he had found, were violent and stubborn and brutal. If Scalotti, Dulcey, and the others hated cops, they must hate violence, stubbornness and brutality.

"There are two peoples, then," he decided. "I have found the good kind. Not all creatures of this world are ugly. Dulcey is magnificent physically, a splendid scientific study."

As if summoned by his thought of her, Dulcey slipped noiselessly into the room.

"I came back, Joey," she whispered. "You were telling me something when I left."

He smiled. "Only to repeat that you are beautiful."

Dulcey's smile answered his, and warmed the synthetic heart inside him.

"You say it like you mean it, Joey. Gosh, a girl don't often meet a guy like you."

He offered her a seat on the couch beside him, and she accepted almost timidly.

"Can you make gold like that, any time?" she asked.

"I can. Gold, and water, and proteins, and carbohydrates for synthetic food, and—"

"But gold!" she breathed, as if in ecstasy. "Maybe even diamonds!"

He had a slight difficulty in understanding that last word. When she had explained, he nodded once more.

"Get me a piece of carbon to transform," he bade her. "Then I can prepare diamonds, too. It is, in many ways, easier to do than the gold-atom process."

Dulcey's eyes were two dark stars in her radiant face.

"Joey," she breathed. "If I'd only met you before Scalotti showed up. Maybe it's not too late."

Uoi stretched.

"I feel tired," he said. "I will sleep, Dulcey. Shall we talk again tomorrow? About diamonds, for example?"

She rose quickly.

"Yes, Joey. We'll talk about diamonds—and us."

"And us," he repeated courteously.

CHAPTER III

Bewilderment

IN the parlor on the first floor, Scalotti and his aides held a council.

"We're in the money at last," Scalotti gloated. "Gold in big chunks, tons of it, thirty bucks and more an ounce. This Joey guy can make it like it was mud pies."

The others nodded. They were becoming used to the idea. Only the one called Dave had an objection.

"You know, we done all right because the G-boys never had anything on us," he reminded. "But any big load of gold pourin' out of here'll make old Uncle Sammy come pokin' his whiskers around. Those guys ain't no tonic."

Scalotti lighted a cigar.

"I wonder if Joey isn't the answer to that, too," he said. "I had a guy check up at the police station around the corner. You know what? Three big harness bulls have got broken arms or ribs! One's in the hospital with concussion. Five're hurt plenty other ways. A medical examiner dropped from being plain scared. All that's the work of this Joey of ours, bare-handed and alone. He's big, all right, and pure poison."

"Hope he don't get sore at us," put in another.

Dulcey entered just then, and Scalotti had an inspiration.

"I think we can keep him friendly," he told the gathering. "Joey seems to like Dulcey here. Dulcey, you keep him sweetened up, see? Smile him along, and we'll all be on velvet. Get me?"

"I get you," said Dulcey, but her eyes seemed to reflect other plans.

On the following day, Scalotti had Uoi's stolen uniform burned in the basement furnace. He had the boys shop for some clothes for him. All of Uoi's new friends were most cordial and anxious to help. Dulcey looked on with an uncharacteristically shy glitter,

as though to remind him that they shared some secret or other. At Scalotti's request, Uoi made more gold out of leaden lumps brought from a junk-yard in Brooklyn.

The watchers almost cheered when Uoi achieved this. To him it was a simple and rather boresome phenomenon. They offered him some pungent-sweet liquid in a glass, which they called brandy. Uoi only sniffed it and declined with thanks. Then four of the men offered to teach him a pastime called poker. At the end of an hour he had won all the money they had, but gave it back.

"Say, you took every pot but one," pointed out Dave suspiciously. "Are these cards marked? No, not that I can see. Joey must be a mind reader."

"Exactly," agreed Uoi. "It does not always work, because your minds are not disciplined enough. But when you concentrate on anything—the markings of your cards, for instance—I know what you think. You see—"

But he broke off again. He could hardly hope to explain the thought-transference mode of communication which was common on Mars. Meanwhile, his erstwhile opponents in the game stared at him in half frightened amazement.

"Why did you give them back their money?" asked Dulcey, who came in after Scalotti went away with the transmuted pigs of lead. "You don't care much for cash, do you? But why should you, when you can make it out of thin air?"

"Not out of thin air, exactly," Uoi corrected her. "But out of lead. . . . What is this you have brought? A lump of carbon. Coal, you say it is called? And to make a diamond with, of course."

HE went into the kitchen on the first floor, choose a stone vase for a crucible. He quickly fashioned a heater from the wire terminals of another dismantled light connection.

While Dulcey watched in awe, he generated a tremendous heat in his crucible, popped in the egg-sized lump of coal. Then, with his lens, he selected a ray from the lamp overhead—a pressure beam. Minutes passed while

Uoi wrought skilfully. At last he turned off the electricity, hurried his crucible to the sink and cooled it with running water.

Plunging in his hand, he drew forth a great glittering crystal. White and many-faced, it bore a point of fire at its heart.

"A diamond," he announced. "Somewhat small, but—"

She snatched it from him, as though it were food and she were starving.

"Small?" she shrieked. "Why, it's marvelous—It's royal!"

She squeezed the jewel between her hands, then pressed it to her heart, as though she would draw warmth and life from it.

"But it is only large enough for coarse drilling or cutting work," he protested. "If I had enough carbon, I might have made one of fair size, roughly as large as your head. That would polish into a lens, or a prism to sort and diagnose rays of various fuel lights. But if this little creation makes you happy, Dulcey, you are welcome to it."

She flung her round arms about his neck with an almost hysterical strength. Dragging his face down to hers, she kissed him soundly. Then she ran out of the kitchen with the diamond clutched in her hands.

Uoi was more mystified than ever. He had not done anything that he considered remarkable. As he had said, the simple process of making gold from lead was more difficult than this manufacture of diamonds. But it had pleased Dulcey, and that strange action of hers had undoubtedly signified approval.

He wiped his mouth. Odd, these customs of the Green World, yet not

unpleasant. His lips still tingled, as from the application of some ray or current of power. Dulcey was rather like a dynamo, at that, but a very esthetic dynamo. He wished he could take her back to Mars with him, to show to his colleagues. But she would certainly die in that planet's thin, oxygen-hungry atmosphere.

Meanwhile, Scalotti came to find him. Scalotti was very pleased, for he had sold the lumps of gold for some thousands of dollars. He invited Uoi to go with him and Dulcey to a night club.

"Night club?" repeated Uoi. "That would be a new experience. Yes, I will go."

THE place reminded Uoi of his first strange moment on this planet, it was so crowded and noisy, so full of glaring lights. Waiters seated the trio at a table near a little rectangle of floor. There bored looking girls of much less attraction than Dulcey danced and postured, clad in brief costumes. There were also silly-faced men who made remarks at which all hearers laughed except Uoi. Waiters kept bringing food and drink. Uoi ate only sparingly, and did not taste the liquor at all.

In the midst of this activity, a bulbous man with gray hair and a ballooning white shirt-front came from a nearby table. He spoke boldly, introducing himself.

"Pardon me, folks, but my name's Jim Deckworth."

It meant nothing to Uoi, but Dulcey chattered in welcome, while Scalotti bowed and grinned hugely.

"Oh, the movie producer. Sit down

[Turn page]



Mr. Deckworth. Have a drink. Pleasure to meet you."

She leaned forward winningly as Deckworth seated himself, but the newcomer's interest was in Uoi.

"What name, please? Marks, you say? Mr. Marks, you have an extremely interesting face."

Uoi waited for the man to continue.

"You are—well, photogenic is the word these days. Are you in show business?"

"I am a very humble scientist," Uoi told him.

"Young, at the foot of the ladder, eh?" suggested Deckworth. "Not much money, I guess? Listen, Mr. Marks, I can put some real cash in your way. You're a picture possibility that isn't seen every day. I'd like to talk business with you. I want you to appear in my moving picture."

Uoi understood that. His mind went back to the films he had seen, of Athens and the men who had lived on this world millenia before.

"Why should I appear in your moving pictures, Mr. Deckworth?" he asked. "I have said that I am only a scientist—a simple and limited one, not worthy of my enlightened colleagues. Surely there are more interesting subjects than I."

"Great Scott, man!" burbled Deckworth. "Are you playing hard to get? Don't you realize I can make a star of you—get you Hedy Lamar for a leading lady—give you a salary in the thousands?" He chattered wildly at Scalotti. "Are you his manager?" How about talking contract?"

Scalotti, remembering Uoi's gold-making powers, shook his head.

"Afraid it can't be done, Mr. Deckworth. He's pretty busy at some big scientific stuff. If Joey isn't interested, I won't try to force him."

"I've thought of doing some picture work, Mr. Deckworth—I was in the Vanities," Dulcey put in.

But the producer answered only by a vague nod. He excused himself and went away. Scalotti put out a hand and patted Uoi's sleeve.

"Thanks, for sticking with me, Joey," he said.

"Why should I appear in his moving pictures?" demanded Uoi. "He could

give me no reason for such a course. He spoke only of money. Is money everything in this world?"

"It's just about everything," Dulcey told him.

"I was beginning to wonder," said Uoi bewilderedly.

THE richest man on Earth sat in his country home, twenty miles north of Manhattan. He was frail, not old in years but bent and twisted and nervous. Lines of harsh determination criss-crossed above his nearsighted eyes, his predatory beak of a nose.

Alone in his little bed-sitting room, he lounged in bathrobe and slippers, in a cushioned chair that did not make him comfortable. He suffered from insomnia and longed to take a sleeping potion. But he dared not stir up his woefully weak stomach. One scrawny hand held a glass of milk, which he sipped without relish.

He was bored and disgusted. Would nothing happen to amuse him?

But then noise broke out, just beyond the door to the hallway. His secretary and bodyguard were quarreling. No, they were arguing with a third person, somebody with a deep young voice. The bodyguard shouted a deadly warning.

"What's the idea pushing in like this? Don't move, or I'll shoot!"

"Shoot, then," bade the strange voice.

A loud explosion rang out. After that came cries and struggles. The billionaire started shakily to his slippers feet. The door burst open, and a tall, purposeful figure strode in, dragging two others. The billionaire recognized his disarmed bodyguard and his half fainting secretary. They were in the grip of a towering young giant with intent, calm features.

"How dare you?" squeaked the man of money, shrinking out of his chair and against the wall.

The big stranger did not attack him, but thrust his two captors into a corner. Deftly he touched each of them in turn, with his thumb at the side of the neck. The two men fell limply across each other.

"Do not be alarmed," the invader said. "I have not hurt them—only temporarily paralyzed a nerve current. They are asleep. You, the world says,

have more money than anyone else in history."

"You want money?" stuttered the goggling billionaire. "Who are you? How did you come here?"

"They call me Joe Marks. I came in a stolen automobile. And I want no money, only a chance to tell you something."

Limply the other sat down again. The big man called Joe Marks began to speak, swiftly and persuasively, of the things that were in his heart. He came directly to the point, calling money the destroyer of civilization, the perverter of healthful impulses, the killer of kind hearts. He sketched, briefly and powerfully, an imaginary picture of a society where men were judged by personal worth rather than chance possessions. Finally he paused, and waited.

"Well?" he prompted at last.

"What am I supposed to do?" the billionaire asked puzzledly.

"You have the money that is considered evidence of power and virtue. You can arrange anything if you care to, simply by manipulation of trade and commerce. I demand that you decree a new order at once, honest and healthful. I will help you, and advise you."

"Are you completely mad?" burst out the billionaire. "Or are you an anarchist, or what? Clear out of here!"

"You won't listen to me?" asked Joe Marks, hurt.

He came close, extending a big hand. The little man shrank before it, but still shook his head in refusal.

"Even if I press the nerve—for long enough to kill you?" A finger touched the gaunt neck. Exquisite pain gushed through the frail body. "See? If you die, there will be no good in all your wealth."

"I'll make you rich—" jabbered the little billionaire. "Give you a quarter of my money—a third."

"I want none. I want to destroy all power of money."

"No, no!" the billionaire screamed, fluttered his hands, and fainted.

The man who had introduced himself as Joe Marks stood back, wiping his forefinger as if to cleanse it of some filth.

"He will not die," thought the big fellow. "But he thought he would. And

he faced it, rather than give over his hoard of money and what it stood for. The greed has become an instinct. I can do nothing. Or can I?"

He walked out and away.

CHAPTER IV

Utter Confusion

At their apartment-fortress, Scalotti and Dulcey were squabbling so harshly that the rest of the gang had gone out hurriedly.

"I tell you, I couldn't have known he'd get away!" Dulcey said for the twentieth time. Her soft voice had become tinny with anger. "He was in the car with me. I got out to buy a paper, and I took the key along. How could I know he'd start the motor without a key and drive away? Joey's a magician!"

"Joey can do just about anything," grumbled Scalotti. "And you ought to have kept that in mind. Now he's gone, just when we were beginning to cash in on him—"

"But I have returned," said a deep voice they knew.

Uoi walked in. Scalotti sprang up, a hand snaking into the front of his coat.

"Listen here, Joey," he said. "What's the idea of running away from us?"

"I had an errand," replied Uoi. "I hope I did not inconvenience Dulcey by taking her vehicle. The errand was for nothing in any case. I thought to find a man of power, and found an insane fool."

"Never mind that high-flung talk. Joey, I'm head of my mob, and nobody does errands without I say so. Get me?"

Uoi gazed at him, as if comprehending for the first time.

"Surely," he said, in mild protest, "you do not think that I am here to take orders from you, and not to move otherwise?"

Scalotti's whole body grew tense as a guy-wire.

"Look out, Joey!" warned Dulcey.

Something in her voice made Scalotti grow pale, then turn reptile-fierce.

"Why should he look out, and why should you tell him to?" he gritted at the girl. "Say, maybe you two been cheating on me, huh?" His lips skinned viciously from his teeth. "So that's it! I'll—"

The pistol came out from under his arm. Uoi flipped it out of his grasp. With a wild curse, the disarmed gangster sprang full at Uoi, who struck out calmly with his fist. Scalotti spun around like a top and went down on his face with a thud. He did not so much as stir.

Dulcey gaped, clenched her hands to steady them, and took a shaky step toward the fallen mob leader.

"It's of no use," Uoi informed her. "He is dead. My blow broke his neck."

She lifted her eyes to Uoi. He saw that she was deeply moved, for the blood drained from her face, leaving it white.

"Well," she said slowly. "I guess this makes it you and me, Joey. We'll have to get away from here."

He nodded and led the way. Outside, it was late night. They got into the car that Uoi had purloined for his visit to the billionaire. He took the wheel and drove them northward, until they reached Central Park. He paused where the road skirted a parapet, and led Dulcey out of the car. They gazed over the stone railing and down a face of rock. Uoi marshaled words and ideas.

"Dulcey," he said at length. "I must first tell you that, though we are of different peoples, I find you to be my one chance for sympathetic understanding and help. You saved me from those creatures called cops. You have been kind and willing to learn and listen. You are beautiful."

HE paused, for she was simpering. She did not seem serious, though she paid close attention. After a moment, he went on.

"I did not intend to stay long here, but I have changed my mind. I barely touched the fringe of this world's scientific potentialities. Its advantages, which no native has yet begun to develop, are endless in quantity and variety. We shall see to them, you and I."

"Together?" she whispered, and came

close. Her reason was obvious.

She hung on his words. That decided him.

"First of all," he told her, "we must seek out one or two of the best men of science. They can learn and help. Gradually, we will develop a new, healthy viewpoint. Nobody on this Green World need fight or misunderstand."

"It sounds great, Joey," nodded Dulcey. "Look, I brought this along."

She produced the diamond, which glowed in the rays of the car's headlights.

He took it.

"Why did you bring it, Dulcey? Why bother with this inconsequential thing?"

"Because we'll need money," she began to say, but he cut her off with a gesture.

"Dulcey!" he cried, outraged. "Money, money, money! Is no other thought important? Have you not listened to what I was saying? Or did it not make you understand?"

She heard and answered only one of those questions.

"Well, Joey"—her soft voice hardened—"I always knew you were a screwball, but I figured you had some of the answers. What is important if money isn't?"

"Science is important," he replied at once. "Understanding is important. Well being, good will, mutual help. Beside such things, money is nothing—merely a stack of green paper or a jingling heap of shiny chips of metal."

"You sound like you don't want any of it."

His head wagged in furious denial of any such wish.

"I am going to turn the thoughts of this world away from money," he announced. "In a year, people will be aware of my scientific achievements and good works. Some will begin to listen. In two years, followers will come. In three—"

"You're as balmy as the Gilead chamber of commerce!" Dulcey snapped. "If you don't want money, I do."

"You cannot mean that."

She set her shapely arms akimbo, cocked her lovely head sideward.

"Listen this time, feather-brains. The

only reason I ever took to you was because of the dough you could make, gold and diamonds and all that. If you're turning preacher on me, we quit. Give me back that diamond, and we'll say good-by. I'll go look for somebody regular, who knows what a girl wants out of life."

He gazed at her as at a strangely reacting specimen under a microscope. He did not move to return the diamond, and she thrust out an insistent hand.

had first manufactured to make gold with. Stepping to the front of the parked car, he concentrated a ray from the headlight, full against the diamond. Dulcey tried to run in and snatch the jewel, but he kept her away with one outthrust elbow.

FINALLY he turned to her and held out his hand. Between finger and thumb he held a lump of black coal. "Here it is," he smiled mockingly.

*Meet the Men Who Pilot the Space Armadas
of the Centuries to Come!*

•
**WEST POINT
OF
TOMORROW**

By
ARTHUR J. BURKS

•



**A COMPLETE FULL-LENGTH NOVEL OF THE
PLANET PATROL—FEATURED IN NEXT MONTH'S
SPECIAL SCIENTIFICKTION NOVEL SECTION**

"Give it here, Joey."

He shook his head again.

"This diamond, I say is nothing. I take it back. It is a bad gift, I am afraid, and you will put it to a foolish and depraved use."

"Oh, so you're turning legal? Well, Mister Lawyer, I gave you the hunk of coal it was made out of."

"That is quite true," he agreed.

He put his other hand into his side pocket. From it he drew the lens he

"Carbon, returned to its previous form. See!"

He tossed it over the parapet. It shattered on the concrete curb yards below them.

Dulcey's face writhed into a fearsome mask of anger and horror.

"You—you—" she mouthed at him, half lifted her hands to strike.

Then, forgetting all else but her desire to save the diamond that was no longer a diamond, she sprang from the

parapet. Uoi watched her fall, like a whirling billet of wood. Her head struck first, against the curb not far from where the bit of coal had shattered.

Uoi heard something like a flat crumpling sound. She sprawled over on her back. From below, her face stared up, tallow-pale in the dimness.

Uoi gazed down, knowing that she had died on the instant. Dulcey would never more know the impulsion of greed and deceit. Never again would she betray an ingenuous trust reposed in her. . . .

"So ya trun de goil down. Moider, huh?"



For a moment, Uoi thought it was the same voice he had first heard on the Green World, the instant of his arrival. Turning, he even thought that it was the same individual—thick-set, red-faced, blue-uniformed—who hurried from a tree-fringed side path. Then he remembered that that first cop had suffered a broken arm at his hands. This one was whole and sound, otherwise he barely differed.

"Moider," accused the cop, pointing down at the prone body of Dulcey. "Dat means de electric chair."

Uoi turned toward him, interested. "Electric chair? What is that?"

"Don't make jokes. Ya know de electric chair. T'ousan's of volts all troo ya body, boin ya tuh deat."

That was it, that was it! Uoi felt sunny inside. He was sick of this planet. The electric chair of which this cop spoke would release him. Such a great inpouring of electric waves would uncouple the artificially assembled molecules of this body he inhabited, re-

lease and allow his consciousness to return—

"And that happens to a murderer?" he asked. "All right, then. Take me with you to the electric chair."

He was something of a sensation during his trial. The prosecutor offered to get him off with a life sentence if he pleaded guilty. Uoi refused with disgust. His defense was no more than a formality, a misery to the poor young lawyer assigned him.

When Uoi was called to the stand, he perplexed and harried the prosecutor by asking some puzzling questions of his own. When a psychiatrist was summoned to judge Uoi's sanity, Uoi electrified the courtroom by pronouncing that psychiatrist insane.

And so, at last, he was found guilty and sentenced to die. Twice, in the death house, he juggled open the door of his cell and went for a stroll in the corridor. But each time he submitted cheerfully to being locked up again.

At length came the day, the hour, the moment of his death, the instant he had been longing for.

Sitting in the chair, he spun all the tale of his adventures through his memory.

Then, as once before, arrived a moment of confusion. He felt a sudden jerk into a tunnel of blackness—

"Hey!" He heard a diminishing shriek. "Look, he's melting away!"

* * *

IN the glass-roofed building on Mars that was office, laboratory and observatory all in one, Uoi's colleague's helped him out of the transparent cylinder. He palpitated his bladder-body, writhed his six tentacles, stirred the sensory petals upon his cranium. He had to assure himself again of their use after his experience in bipedal form.

"Uoi, Uoi," came the chorused impact of their thought waves. "Was the journey a success? Did you find a great civilization—a paradise where other Martians can exist and flourish?"

"There was no paradise," was his immediate and doleful reply.

"Then the Green World—"

"The Green World is no fit place to live. My impulse is to urge a concentration upon the world next beyond, the

mist-wrapped planet that revolves second from the Sun."

A mental flutter of surprise palpitated all around.

"But that second planet is a primitive place, Uoi! It has no intelligent life."

"I know it," he conceded.

"And the Green World you visited has intelligent life, has it not?"

"Of a sort, yes."

"Civilization?"

"Of a sort, yes," repeated Uoi.

"Then what danger, what horror, causes you to warn us away from it?"

"A grave one. It will take me long to explain it." Uoi stopped to consider. "In the vocal-communication manner of the Green World people, it is designated as money."



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A PROBLEM IN DIATONICS

By **NELSON S. BOND**

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MUSIC, sweet and hot, pulsed through the ornate ballroom of the *Phoebe*, luxury liner of the IP Fleet, Earth-bound and four days out of Io City spaceport. Dancers gyrated on the floor, feet scraping a pleasant shush-shush in rhythm to the distinctive tempo of the band.

The music softened, and the percussions picked up the theme. Strings sobbed. The drums beat a soft tattoo. Deep and cadenced, the vibrating cords of the "doghouse," the bass viol, struck a jungle rhythm in the background.

The dancers' steps flagged as they listened, entranced. The woodwinds picked up the theme. "Red" Starr spun his bull fiddle with a flourish, leaned it against its rest, and picked up his baton.

"Okay, gang!" he said. "Jet along pretty! Give 'em the old swoop!"

His first violin gave him the wink.

"Doorway, Red," he whispered.

Red glanced over his shoulder, saw the girl, and tossed his baton to the fiddler.

"Pick it up, Tony!"

He stepped down from the podium,

on which a gleaming grill announced the music of "Red Starr and His Seven Satellites," and pushed through the tightly woven knot of dancers. The object of his interest had moved toward a small table on the edge of the floor. Red reached her before she sat down. He touched her shoulder.

"What," he asked, "did you say the name was?"

The girl smiled.

"Bjornsted," she answered. "Joy Bjornsted. The girl you kissed last night, up on the observation deck. Remember?"

Red snapped his fingers.

"Last night? Ah, now it all comes back to me! I believe there was a girl!" — he frowned — "But, Bjornsted! I don't like the name. We ought to do something about it!"

Joy Bjornsted laughed.

"And what would you suggest, Mr. Starr?"

"I'd suggest 'Mrs. Starr,'" said Red. Then, more softly, "And I'm not fooling now, Joy."

"I know," Joy Bjornsted's eyes clouded. "Shall we dance, Red?"

"Why not? It's good music."

They moved out onto the dance floor, joined the others gliding there. Artificial gravs held their little space-encircled world motionless beneath their feet. The *Phoebe* did not have even the rock and pitch of an Earth-sailing vessel.

Red danced, feeling the closeness of the girl keenly, wishing conditions were not as they were. That he were something other than the leader of a space cruiser orchestra. That Joy were not —

As if sharing his thoughts, the girl whispered:

"Cheer up, Red. Dad will come around — in time."

"Sure," said Red gloomily. "When we're both gray, and I have whiskers down to my knees. I want to marry you right now!"

"And I want to marry you, Red. But you know how Dad is. Like all the old-time spacehounds, he's as hard as nails and convinced that the only men worth anything are the members of the IP fleet. He can't get used to the idea that . . ."

"That an orchestra leader," finished Red, "should be allowed to live. Yes, I know. But, darn it, the old boy . . ."

"Shhh!" Joy pressed his arm. "There he is now!"

Red glanced up swiftly, just in time to see Captain Vic Bjornsted, big, bluff skipper of the *Phoebe*, and number one officer of the IP space fleet, barge into the ballroom like a uniformed mammoth into a tea shop.

DISGUST wrinkled the older man's features as he stared at the scene before him. One of that intrepid band of pioneers who had first "cracked space," the skipper had outlived his time. He had seen interplanetary travel grow from puling infancy to sturdy manhood, seen the conquest of space cease to be a romantic adventure and become a commonplace.

And he couldn't get used to it!

In recognition of his services, a grateful IP Corporation had given him command of their latest and most luxurious liner, the *Phoebe*. It was a wasted gesture. The skipper despised his ship. He would have rather guided a wallowing old freighter across galactic space than herd this mob of vacationing sightseers.

And now, to cap his woes, this romance! A short burst from Captain Bjornsted's lips as his roving eyes finally located his daughter in the arms of that damned, scrawny, son-of-a-space-wrangling orchestra leader!

He took a three-point bearing on the couple, lurched across the dance floor, ruthlessly oblivious of the stares of those he elbowed aside. He reached his destination and squared his jaw belligerently at Red Starr.

"Well?" he bellowed.

"Good afternoon, Captain," Red said pleasantly.

"Good afternoon be damned!" roared the skipper. "I think I told you that . . ."

Joy said anxiously:

"Please, Daddy! Not so loud!"

"Who's talking loud?" demanded Bjornsted in a voice of thunder. "I'm barely whispering. You, young man! Didn't I advise you to blast clear of my daughter?"

Red stiffened. He wanted to be

friendly with Bjornsted, but the skipper's antagonism made advances impossible. And Red had a temper of his own, one adequately supported by the wiry, whiplash muscles concealed by draped sports clothes.

"You did," he acknowledged. "But I didn't like your advice. So I didn't take it. Look here, Captain . . ."

"Don't 'look here' me, you young whippersnapper! I gave you my orders. Obey them! I won't have my daughter chasing around with any baton-wielding bandmaster. When she marries, she's going to marry a man who knows something! A space-hound!"

Red's jaw tightened. He knew that this scene, presented to the curious gaze of the other dancers, must be distasteful to Joy. But he could no longer restrain his answer. He gritted:

"Orders, eh? Well, here's my answer, Captain . . ."

"Red! Please!" Joy said.

Red faltered. He looked at the girl uncertainly. Bjornsted stretched a horny palm to the podium and brought it down with an instrument. He pushed the bass viol toward Red.

"Here's your overgrown fiddle, sonny!" he mocked. "Forget your aspirations and play a pretty tune. Joy, come with me. We're just entering the asteroid region, and I want to show you how it looks when . . ."

That was as far as he got. For at that very minute, as Red was moving toward him angrily, as Joy was desperately signaling Red to curb his ire, as Bjornsted was attempting to guide his daughter from the ballroom—disaster struck!

There came an ear-shattering, grinding screeching sound from forward, the complaining groan of tortured metals rending asunder. A blue flash, and the lights went out. Through the thick panes of quartzite, a lurid effulgence licked the sky. As though struck by a massive fist, the doomed *Phoebe* lurched and trembled. Momentum threw the horde of terrified passengers forward—frail, human projectiles. Screams rang out. Cries of fear and panic!

Red hit the floor agonizingly.

Skidded across its polished surface, scrambling and clawing. He heard his own voice, weak in his ears. "Joy! Joy!" It was lost in the mad cacophony of other cries. In that bedlam, only one roar made itself heard. The bellow of Captain Bjornsted.

"My God, we've hit something!"

IN moments of disaster, it is always the most silly things that leave the deepest impression.

When Red Starr came to his feet, finally, he had but one coherent desire. That was to confront Bjornsted and tell him what a darned fool he was. Hit something! It didn't take any gray matter to tell that. Of course they had hit something!

Then the moment of anger passed, and his mind was full of many things. He was conscious that he was no longer walking the floor of the ballroom with ease. His every motion had a tendency to throw him away from the floor. He looked around him. The brief gleam had gone, but in the dim light from the observation panes he saw the chaos the crash had created in the ballroom.

People were sprawled everywhere—but always toward the wall facing forward. Momentum had thrown them there. And some, he saw, shuddering, would never rise again. One man Red had seen a few minutes ago, laughing and dancing with a lovely companion, was now a crumpled heap of broken flesh against the wall. Others—Red looked around swiftly—others had been more fortunate. They were struggling to their feet.

But in the accident the grays had been ruined. Red saw, as in a dream, how those who moved too energetically thrust themselves away from the floor to drift weightlessly toward the ceiling.

Ceiling—floor—floor—ceiling—it didn't make any difference now. All was weightless in this crippled hulk that was broken and drifting aimlessly through space.

"Joy!" he cried.

"Red!"

He saw her then. Like himself, she and her father had eased cautiously to their feet. Bjornsted had groped his

way to the inter-communications unit on the far wall of the ballroom. He was bawling into it.

"Bridge, ho! Farnell! Jones! Ho, anyone on the bridge?" he cried.

Belly strained to the floor, Red managed to reach Joy as the skipper turned, a look of baffled grief on his face. The skipper's voice was choked.

"There's no answer."

"The engine room?" suggested Red.

In this hour of trouble, there was no time for personal animosities. Silently, the skipper pressed another button, yelled:

"Engine room, ho! Chief Enderby!"

This time there came an answer. A cracked voice, one in which there was a note of hysteria.

"Engine room—answering! Who's calling?"

"Captain Bjornsted. This isn't Enderby, is it?"

"No, sir. This is Muldoon, third engineer. Enderby and Thompson are—
are dead, sir." There was a moment's silence. Then, soberly, "Thank God you're alive, sir! We all thought you'd gone out with the helmsmen."

"I'm in the ballroom," explained the skipper. "What happened, Muldoon. Do you know?"

"No, sir. We got an emergency flash, reverse engines, from the turret. Then came the crash."

"And the air? We're not leaking in here."

"Neither are we, sir—yet. But I sent one of the wipers out in a 'bulger,' and he reports that the oxygen tanks were destroyed in the crash. We're using all the air there is."

CAPTAIN BJORNSTED frowned.

"How many men have you, Muldoon?"

"Sixteen, sir."

"You have enough bulgers to go around?"

"Yes, sir."

"Very well. Outfit your men and take to the skiffs. We're abandoning ship."

"Very good, sir."

"And report to me by radio as soon as we're all free in the skiffs."

"Very good, sir."

"And, Muldoon—"

"Yes, sir?"

"You're second in command now. If anything happens to me, these passengers' lives are your responsibility. Get them to Earth or Luna if you can. If impossible, get them to one of the major asteroids. Can you navigate?"

"I—I can try, sir."

"Very well, that's all. Goodbye, Muldoon."

Again a moment of silence.

"Goodbye, sir!"

Captain Bjornsted turned from the communication unit. As he had been speaking, the passengers had been slowly finding their way toward him.

"Now," he said, gravely. "You all understand our situation. During our life drills, you have learned where your life skiffs are located. The passageway to the skiffs has air. Go to your skiffs and cast off. You will find instructions printed above the instrument panel. When you get 500 yards from the ship, wait until you get further orders by radio. Do you understand?"

The next half hour offered Red Starr a scene he would never forget. He saw, and understood for the first time, the space genius of Captain Victor Bjornsted. He saw a group of badly disorganized space vacationers molded into a quiet army of obedient, determined sailors—who did as they were told. No questions, no complaint, no panic.

With Joy beside him, he watched as Captain Bjornsted, single-handed, assigned the survivors to their life skiffs, gave them instructions, saw them cast off.

There were scenes, of course. Touching scenes. The little girl who wept over the mangled body of her pet puppy, climbed into her skiff sobbing inconsolably. Red knew he would never forget the look in her eyes as she pressed her tear-stained face to the glass for that last, lingering farewell glance.

There was the portly business man who demanded the right to go to his stateroom, for, "A fortune, Captain! A fortune in Martian bonds!"

There was the little chorine from a

cheap Martian dancehall who grinned impishly as she was put into the enforced intimacy of a two-man life skiff with a lantern-jawed missionary.

"Here we go, folks! Anybody want to make book on who wins?" she asked wryly.

And ultimately, the ballroom was clear, save for three people. All the others had been cast off, and there was but one life skiff remaining. Captain Bjornsted turned to his daughter.

"Well, Joy . . ." he began.

Then, for the first time, he saw Red, and his mouth dropped open.

"You!" he said.

"If you thought I was going to leave Joy, you were crazy, skipper," Red said firmly. "I'm here now, so you're in for it."

But there was no anger left in Captain Bjornsted's system. His shoulders sagged wearily. He shook his head.

"No, Starr. You're here—and you're in for it."

JOY sensed the sinister meaning in her father's dull voice. She clutched his arm.

"Dad! What do you mean?"

"I mean," said the skipper, "that I purposely saved this last skiff for us, Joy, because it is the poorest of the lot. It has no radio. It is an old, emergency model. With only about half as much fuel in it as the others." He glared at Red with a spark of his old flame. "I suppose you'd like to ask, my baton-flinging friend, why I did it? Well, it's an old tradition of space that the captain sees his passengers to safety, and takes the leavings for himself. . . ."

Joy interrupted quietly:

"You needn't tell Red, Dad. He understands. He understands, too, that the captain's daughter has to stick by her Dad."

"There's another thing I understand, Captain," Red said. "I hope you will, too. That is—that the orchestra leader had to stick by the captain's daughter."

Captain Bjornsted stared at the young redhead. Then for the first time, the harsh lines of his face relaxed. Not much. But—a trifle. He

said, new respect in his voice:

"Maybe I do, Starr. Maybe I do. Well, there's just one chance in a thousand, but—come on!"

Silently they crowded into the tiny life skiff. The captain shoved off.

They spun away from the ship's side, cruised.

"Fourteen point six!" said Captain Bjornsted.

"Fourteen point six. Check!"

"Right declination, three-naught-nine-five!"

"Right declination, three-naught-nine-five. Check!"

The skipper looked anxiously at the pad on the girl's knee.

"Well?" he said.

"Just a minute." Joy finished a hasty calculation. "Looks like Obler III to me. That's its approximate position, according to this chart."

"Obler Three?" said Red. "Hey, I used to know a miner who worked there in '86. He said . . ."

"Mr. Starr!" growled Captain Bjornsted impatiently. "Will you be good enough to shut up?"

He rubbed his grizzled pate thoughtfully. Red shrugged, winked at Joy, and relapsed into silence.

"Let me see—Obler III. One of the smaller asteroids. Not more than twenty miles in diameter, as I recall. Used to be a mining station for . . ."

He snapped his fingers.

"Of course! For fuel! That's the answer!" He fingered the controls rapidly. "We'll land there. If we can get enough fuel out of those abandoned shafts, we can still make Luna! Joy, we're not licked yet!"

"Of course not, Dad!" Joy said sturdily. Then, to Red, "What was it you started to say, Red?"

Red plucked the E string of his doghouse thoughtfully. Strangely, the big instrument had remained with him throughout the excitement. He had clung to it as the only stable reminder of the pleasant, untroubled world of short hours ago.

"Stop twanging that damn thing!" Captain Bjornsted boomed.

"Okay," said Red amiably. "Why, nothing much, Joy. I just remembered hearing that miner say that Obler III is a screwball sort of place. Its

atmosphere isn't at all like the atmosphere of Earth."

CAPTAIN BJORNSTED interrupted dourly.

"What he means, Joy, is that the atmosphere of Obler III is composed mainly of krypton, in an unusually condensed state. Not breathable. But it produces some fantastic phenomena, as in sound, for example. Under the peculiar conditions existing on Obler III, sound has the amazing velocity of . . ."

"Almost 16,000 feet per second, Joy!" Red finished. "Can you imagine that? Almost the same conductivity as iron on Earth! Yet it's only a gas!" He grinned a lopsided grin at the skipper. "See, Cap? I do know something, after all!"

"Bah!" snorted Bjornsted. "A space-man told you! You musicians! Shut up and play your fiddle." Then as Red reached for the big violin. "No, I didn't mean it! Put the damn thing away!"

"Make up your mind," grinned Red. He peered through the forward visi-scope. "How long before we land, Skipper?"

"We're practically there," answered Bjornsted. "Hold on to the braces. These light craft don't land easy."

He was right. The life skiff bounced twice before it settled. But inside of minutes, the boat was resting on the granular, metallic soil of the tiny asteroid. Bjornsted adjusted his tubes for a few routine tests.

"There's one thing I can't quite understand, Skipper," Red asked. "This is an asteroid, isn't it? But the thing that hit the *Phoebe*, that was an asteroid, too. If you could plot the course of this one, how is it that your officers on the *Phoebe* bridge didn't know where the other one was?"

"That's one of the hazards of space, Starr," Bjornsted answered sombrely. "The thing that struck the *Phoebe* was what we call a 'rogue asteroid.' There are several hundred of them adrift in the asteroid belt. They are large enough to be held in a relative course by the sun's attraction, but so tiny that their path can be altered from day to day by the gravitation attraction of

the larger asteroids they come near.

"There is no way of knowing where they are going to pop up. They remain one of the constant hazards of space travel. The Space Safety Control Board has now an interplanetary program pending approval which will permit them to destroy these rogues. But until that is done, things like that which happened to the *Phoebe* will occur."

He shook his head sadly. He was thinking of twelve good men and eight passengers who had died so that the progress of space-conquest might go on. Of the luxury liner *Phoebe*, now a twisted mass of metal spinning aimlessly through the asteroid belt.

Red coughed uncomfortably. He said, "I-I'm sorry, Captain. I'm sorry, too, that we couldn't keep in touch with the others."

Bjornsted turned an angry face to him.

"Ah! So you're sorry, now, you came with us! Well, Starr, I told you this life skiff had no radio. I couldn't imperil all those others just because we . . ."

"I didn't say that!" said Red hotly. "If you weren't such a thick-skulled old Swede—"

"Red! Dad!" Joy's pleading voice broke the tension. "We have enough worries without your making it worse by argument. Shall we go outside?"

Both men looked sheepish.

"Check!" said Captain Bjornsted.

THE soil was harsh and metallic, but it slipped beneath the leaded soles of their bulgers like slippery sand. After five minutes' walking, Red Starr was wet with perspiration. He muttered, "Whew!" beneath his breath, and was surprised to hear the answering voice of Joy in his ears.

"Get you down, Red?"

Red started.

"Hey! How did you hear me? I don't have my audio turned on," he cried.

From fifteen feet ahead, Captain Bjornsted grunted.

"That's a practical demonstration of this funny atmosphere, Starr. In addition to its velocity, it maintains perfect clarity of tone." His voice was

derisive. "Should be a perfect place for a swoop band."

Red nodded enthusiastically.

"You bet!"

Then they were surmounting a hillock, a bleak, desolate fragment of wind-whipped rock. And gaping before them was a hole about eight or ten feet in diameter, a black orifice which went straight down. Captain Bjornsted said in a tone of satisfaction, "Hah!"

"What is it, Dad?"

"An abandoned shaft. Now, if there's only enough permagam ore left at the base, we can load up on fuel and make *Luna* without any trouble." He bent over, peered anxiously into the man-made crater. "No telling how deep it is. I don't know how we're going to get down there."

"Dad! There's an emergency rope on the life skiff!" Joy said.

"Well?" The skipper looked puzzled.

"Well, I'm light. Even in this bulger, I only weigh about 150 pounds. Less than that on this tiny asteroid."

"Now, don't be too sure of that, Joy," Captain Bjornsted said. "Permamgam has terrific mass, you know. Despite the size of this asteroid, it has a lot of gravity."

"But not as much as Earth! You and Red can lower me down the shaft, Daddy. I'll send up all the permagam we need—if there is any, of course."

"I think I ought to go down, Skipper," interrupted Red. "I know I'm not much good around here, but I can surely identify permagam when I see it."

"You!" sniffed Bjornsted. "No, Joy's right. She's the lightest. Get the rope, Starr!"

Red wallowed back to the ship. He was back in a few minutes with a length of rope wound about a crude harness-spindle. Captain Bjornsted took a bowline about Joy's waist, tested it, and nodded.

"Take the flashlight," he said, "and—good luck, Joy! If you don't find some permagam down there—" He shook his head ruefully. "All right, Starr. Give me a hand here!"

The girl disappeared over the lip of the shaft. The two men started un-

reeling the rope from its spindle, lowering her slowly. Rope melted from its coil-like tinfoil before a flame. Down, down, down—

"Hold it," said Bjornsted. He went to the shaft. "You all right, Joy?"

Her answer came back, clear as a bell.

"All right, Dad. I'm flashing my light, but I can't see bottom yet. Keep unwinding."

"Check!"

Again the two men let the rope reel out. Red Starr glanced at the spindle anxiously. It was getting thin now. Not a great deal more rope left on it. If Joy should not be able to reach the bottom of the old mine shaft, they three would be marooned on *Obler III* for heaven only knew how long.

The rope continued melting away.

"Dad!" cried Joy Bjornsted. "Red!"

BOTH men leaped for the spindle at the same time—but too late. The drum had been larger than they had expected. And suddenly, in the twinkling of an eye, the last few feet of rope had gone whipping off the reel—to disappear over the lip of the shaft!

Despite his cumbersome bulger, Red was at the shaft like a flash, craning over, crying anxiously, "Joy!"

Then there came a shaky little laugh from below. A welcome sound. Joy's voice.

"I—I'm all right. I was almost at the bottom, and only dropped about six feet. But—but what happened?"

"The rope, Joy!" That was Captain Bjornsted's voice at Red's elbow. "Some fool neglected to fasten it securely to the drum. It—it tumbled down the shaft after you!"

"Oh!" Joy's voice was weak. Then, "Daddy, how am I going to get back up again?"

But Captain Bjornsted was already weighing that problem in his mind. And he had no ready answer. Behind the face-piece of his bulger, his hard features were drawn in strained lines. To Red Starr he choked:

"Wait here! Talk to her. Keep her cheerful. Oh, if I could get my hands on the lubber who forgot to secure that rope!"

He had forgotten that his words were clear to Joy. Now her answer rose from the Stygian depths.

"Daddy, there's plenty of ore down here. Enough to get us to Earth, if we can get it up again."

"It," growled Red, "and she. Skipper, what are we going to do?"

But there was no answer from Captain Bjornsted. Already he was moving away from the shaft, slipping and sliding on the loose, treacherous soil, reconnoitering. Red crouched by the mouth of the pit, kept up a running fire of encouraging conversation despite the anxiety in his heart.

"We'll get you up again, Joy," he said. "Your dad's looking around now. He'll find some way to get you up."

Then Bjornsted reappeared, and there was a smile on his lips.

"Got it!" he said. "Look, Starr, this shaft abuts on an old quarry to the north. In that direction"—he pointed to a hillock from which he had just descended—"there is a sheer cliff that drops down, paralleling the shaft. I can take the life skiff over to the cliff-wall, reverse it, and blast a hole into the shaft with the rear jets!"

Red grinned happily. Then the grin faded.

"But—but isn't that dangerous?"

"Of course not. We'll blast an exit a reasonable distance above Joy. All we have to know is how deep she is." He yelled down the shaft, "It's all right, Joy. We'll have you out in two flickers of a landing jet!" Then to himself, "Now let me see that rope—"

"You don't know how long it was!" said Red.

"Humph!" sniffed Captain Bjornsted. "It was 100 or 250 or—" He scratched his head. "No, darn it, I don't! They come in different lengths." Again he yelled down the shaft. "Joy, measure that rope that tumbled down after you. We have to know how deep you are."

There was a moment's silence. Then Joy's voice.

"I—I can't measure it, Daddy. It's not all down here. It caught on a projection somewhere in the shaft."

"Wha-a-at!" roared the skipper. It was his turn to show alarm. "We can't

do anything unless we know her depth!" he said to Red, swiftly. "If I blasted too high, it would be useless. If too low, I might drop her a hundred feet!"

"And there's always a chance," said Red, "that you might blast right at her level!"

THE skipper nodded. He sank to a crouch, buried his head in his hands.

"It's all my fault!" he moaned. "I shouldn't have allowed her to go down in the first place. I should have inspected the spindle to make sure the rope was secure. I should . . . Where are you going, Starr?"

Red turned, glanced over his shoulder. His eyes were wide with the thought that had occurred to him.

"You want to know the depth, don't you? Well, I know a way to determine it!"

He disappeared to the life skiff, entered the lock. A few minutes later he was stumbling back to the shaft. He was lugging with him an object that caused Captain Bjornsted to gape stupidly for a moment. Then the skipper found his voice.

"Starr, have you gone crazy? What are you going to do with that damned fiddle?"

"Not damn fiddle," corrected Red gravely, "bull fiddle. Or bass viol, if you want to be more accurate."

He moved to the mouth of the shaft. His fingers, clumsy in the fabricoid of the bulger, pawed at the bow, then at the heavy strings. Captain Bjornsted's momentary inertia passed. He made a reckless, groping motion at the instrument.

"You confounded idiot!" he bel lowed. "Stop wasting valuable time! Do you realize that my daughter is down there!"

Red jerked free.

"Careful!" he warned. "And—shut up!"

His fingers sought the strings. It was a high note he tried first. It sang, sweet and piercing-clear, in the strange atmosphere of Obler III. From below, Joy cried, "Red, what are you doing? Why are you playing?"

But Red Starr, musician, was too

intent on the task at hand to pay any attention to the ravings of Captain Bjornsted or the queries of the girl in the pit. His fingers were seeking new positions, and the notes of music were stepping down a descending scale. It was a weird, fantastic theme he played—but on it depended the life of the girl he loved.

The treble scale first. Then out of the treble and into the lower notes. Lower and lower, until the instrument had descended into the deepest range the bass viol permits. The notes got deeper, richer, fuller. Now they had a low, throbbing tone. An organlike quality. In the odd atmosphere, there was new perfection to those tones, a quality that would have delighted Red, had he not been preoccupied.

He hit one note, held it for a long instant. His fingers hesitated on the string, held there curiously. Then he shook his head. The note next lower sobbed its plaintive moan over the mouth of the pit. Again Red paused. There was a light of triumph in his eyes. He plucked the same note a second time. His fingers, sensitive, caught the responsive vibration that trembled through the string. The pit echoed the sound hollowly. . . .

"That's it!" yelled Red triumphantly. "Bass C. It worked!"

"W-what worked?" Captain Bjornsted asked. "I don't understand?"

But he was talking to empty space. Red Starr was on his way back to the life skiff. When he reappeared a moment later, the bass viol had been laid aside. In one hand Red clutched a scrap of paper on which he had scrawled hasty computations.

"Get into the skiff, Cap!" he yelled. "And get going with your blasts. We know how deep the shaft is. Joy is on the bottom, exactly 247 and a half feet below the surface!"

Captain Bjornsted stammered, "B-but—how?"

"Never mind that!" cried Red. "Let's go!"

"This is one of the things a musician does know!" he laughed.

A HALF hour later, Joy Bjornsted helped the two men put the last of the permagam ore fuel in the dis-

tributing chambers of the jet-blasters. She sighed with satisfaction as her father closed and barred the tank.

"Enough," she said, "to carry us right to Earth! Thank goodness the old miners were prodigal with their ore."

The three climbed into the life skiff. It was still a battered old crate, the poorest equipped of all the skiffs the destroyed *Phoebe* had boasted, but it looked good to the trio. It meant home. Home and safety.

Captain Bjornsted studied his charts briefly. Then blasted free from the tiny asteroid.

"We won't make especially good time," he figured, "but we'll get there. That's the main thing. And it's more than I thought we would a half hour ago."

Joy shuddered.

"You thought? How about me, marooned at the bottom of that shaft? If you hadn't managed to blast an exit, only ten feet above me—" She let her words die out significantly.

"Don't give me the credit," Bjornsted said soberly. "I just did what any navigator could have done. It was Starr—I mean—er—Red, here who really did it." His glance at Red was no longer belligerent. It was almost affectionate. "But I still don't understand, Red. How did you figure the depth?"

Red grinned.

"The fundamental," he said.

"The which?"

"The fundamental of the shaft. You see, to all intents and purposes, that mining shaft was a 'closed pipe.' And it is an axiom of sound that, 'The fundamental of a closed pipe is that note whose wave length is four times the length of the pipe.'"

"Eh, Red? I don't get it." Bjornsted fumbled.

"It's really quite simple. Wave length equal velocity over frequency. Or, as you mathematical spacehounds

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would put it in formula, $w = \frac{v}{\lambda}$. I re-

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membered, as you know, what the old miner told me about the auditory peculiarity of Obler III. The dense krypton atmosphere conveys sound at

the incredible velocity of 15,840 feet per second. Incredible, that is, for a gas. Iron does the same thing on Earth.

"That knowledge gave me my 'v'. Then, to get 'n', I played a descending scale on my bass viol—"

"I thought," confessed the skipper, "you'd gone off your button, Red."

"I nearly did. Because I was afraid I wouldn't find a frequency that would set up a vibratory equilibrium in the shaft. I finally found it, though, on practically the lowest note the bull-fiddle will produce. Bass C, with a frequency of 16 vibrations."

"And from that, you deduced—"

"Of course. Divide 15,840 by 16 and you get 990. That equaled four times the depth of the 'closed pipe.' So the shaft had to be 247 feet, six inches!"

Captain Bjornsted scratched his

head. He said meekly, "Red, I think I owe you an apology. I was all wrong in what I said about musicians."

Red grinned again. But this time he acted, too. The act was to reach out an arm and draw closer to him Joy.

"Skip it, Captain," he said, gruffly. "There's only one thing I want to hear you say. That is to add your O.K. to something Joy has already agreed to."

Bjornsted hesitated.

"Daddy," Joy reminded him. "It's a long trip to Earth. And it would be easier if we were all one, big, happy family."

That got him. His broad face cracked in a rare grin. His hand reached out to touch Red's shoulder. It was a farewell to private warfare—and a welcome.

"O. K., son!" said Captain Vic Bjornsted.

Next Month: Pete Manx Goes from Bard to Verse
in THE COMEDY OF ERAS, a Scientifun
Story by KELVIN KENT

When
a girl
needs
help

DON'T OFFEND... USE SEN-SEN
BREATH SWEETENER... DELIGHTFUL CONFECTION



Science Quiz

Do you know your sciences from Astronomy to Zoology? Your elements from Aluminum to Zirconium? Your physics from Acoustics to Zoetrope? If you do, you should score an A on this month's selection of scientific stumpers and stickers.

Non-candidates for the Nobel Prize, however, should refer to page 129 for the correct answers to these quiz-whizzers.

POSITIVE OR NEGATIVE?

The following statements are either true or false. Nothing but the truth brings results. (Par for this course—15 correct.)

1. Hot water is heavier than cold water.
2. The wind in a cyclone in the northern hemisphere moves spirally toward the center, whirling counterclockwise.
3. Increase of atmospheric pressure and temperature diminish refraction.
4. The more nearly vertical the sun's rays are, the more heat they give.
5. A rainbow is formed when a cloud that is breaking up into drops is illuminated by the sun.
6. Oxygen and nitrogen are chemically combined in the atmosphere.
7. The germ cells of one generation produce both the body and germ plasm of the next generation.
8. Water molecules attract each other.
9. A perpendicular to the surface of the Earth always passes through the geometrical center of the Earth.
10. "Zoo" is the shortened term for zoological garden.
11. Valence is the capacity of an atom to combine with other atoms to form a molecule.
12. The planet Venus goes through a series of phases exactly as does the Earth's moon.
13. The Neanderthal Man is directly ancestral to the living races of men.
14. Phosphorous has two isotopes.
15. The moon moves eastward among the stars so much faster than the sun that it overtakes and passes the sun at regular intervals.
16. For the most part, sunspots are confined to two belts on the sun's surface.
17. Liquids and solids are better carriers of sound than gases.
18. Clouds at very high altitudes may be composed of bits of ice; but, in general, they are made up of minute drops of water.
19. A total solar eclipse cannot be seen at midnight.
20. The greatest obstacle to the continued re-use of paper is the problem of removing inks and other foreign substances.

TAKE A LETTER

Is your I. Q. o. k.? Here are ten incomplete scientific facts that are S. O. S.'ing for the right answers. Four suggestions are offered in each case as possible fill-ins for each statement, but only one is correct. Can you pick the winners? Do these P. D. Q. (Par for this group—7 correct.)

1. The best type of instrument for discovering comets is the: (a) spectroscope, (b) "comet-seeker" telescope, (c) refracting telescope, (d) reflecting telescope.
2. The amount of carbon in the body of a man of average weight is about: (a) 2 ounces, (b) 25 ounces, (c) 2 pounds, (d) 25 pounds.
3. The Magnetic Pole of the North is: (a) the same as the North Geographic Pole, (b) in Siberia, (c) in North America, (d) non-existent.
4. The most difficult part of the sun to observe is the: (a) corona, (b) sunspot, (c) prominence, (d) chromosphere.
5. The brightest stars ever recorded have been: (a) double stars, (b) spectroscopic binaries, (c) Cepheid Variables, (d) novae.
6. If a pure tall gamete unites with a pure short gamete the number of hybrids will be: (a) 0%, (b) 25%, (c) 50%, (d) 100%.
7. Compounds of amino-acids essential to life are: (a) proteins, (b) fats, (c) starches, (d) sugars.
8. The number of elements that are metals is about: (a) 20, (b) 40, (c) 60, (d) 80.
9. When sulphur dioxide, oxygen, and water are left in contact the result

formed is: (a) sulphurous acid, (b) sulphuric acid, (c) sulphur trioxide, (d) ammonium sulphate.

10. The Galilean Satellites is the name given to certain satellites of: (a) Jupiter, (b) Saturn, (c) Mars, (d) Neptune.

AROUND THE SOLAR SYSTEM

Do you know your nine planets? Then match the identifying clue with the name of the proper world. This should be simple, if you've been doing your astronomy homework daily. (Par for this trip—6 correct.)

- (1) Mercury
- (2) Venus
- (3) Earth
- (4) Mars
- (5) Jupiter
- (6) Saturn
- (7) Uranus
- (8) Neptune
- (9) Pluto

- () Two satellites
- () Least dense of all the planets
- () Most recently discovered planet
- () 4 Times the diameter of Earth
- () 2,792,700,000 miles from the Sun
- () Mean density $5\frac{1}{2}$ times that of water
- () Most eccentric orbit
- () Sidereal period of 225 days
- () Fastest axial rotation

LIQUID ASSETS

Are you wet or are you dry? Unless you're all wet, you'll be able to decipher the following scrambled terms, all pertaining to water. Number 1 shouldn't melt away your patience. (Par for this course—7 correct.)

1. cie	5. parvo	9. tumydiih
2. wed	6. goyxen	10. rustioem
3. nari	7. tonselv	11. trainpaveeo
4. mates	8. nerohgdyd	12. llttiisonad

DO YOU INHALE?

Here's where we come up for air, in more ways than one. The following passage makes sense only if you supply the proper words in the space indicated by the blanks. All the terms used pertain to the human respiratory system. And if you score a par of 8 correct, you're entitled to a breathing spell! Draw a deep breath, get ready—go!

The Respiratory System includes the nasal passages, pharynx, larynx, trachea, bronchi, and _____. Respiration is governed by a nerve center in the _____, the lowest part of the brain immediately above the spinal cord, and the nerve by which it is chiefly regulated is the _____.

The process of breathing consists in enlarging the _____ by raising the ribs to a more horizontal plane and depressing the _____, so as to inspire air in the lungs.

The amount of air which is taken in and

passes out at ordinary respiration is about _____ to _____ cubic inches. The oxygen is held in the blood in chemical combination with the _____ of the red corpuscles, and is carried in this way from the lungs to the _____ and thence by arteries and capillaries to the various tissues of the body. _____, on the other hand, is given off by the tissues and is dissolved in the blood plasma and combined with the sodium carbonate in it, forming sodium _____; this is conveyed by the _____ to the lungs.

WHAT'S YOUR SCIENCE I. Q.?

After you've completed the SCIENCE QUIZ and checked your results with the correct answers, get a slide-rule and compute your score. Here's how you rate:

- 49-65—Superman.
- 41-48—A Human Encyclopedia.
- 35-40—B.B. (Bachelor of Bookworms).

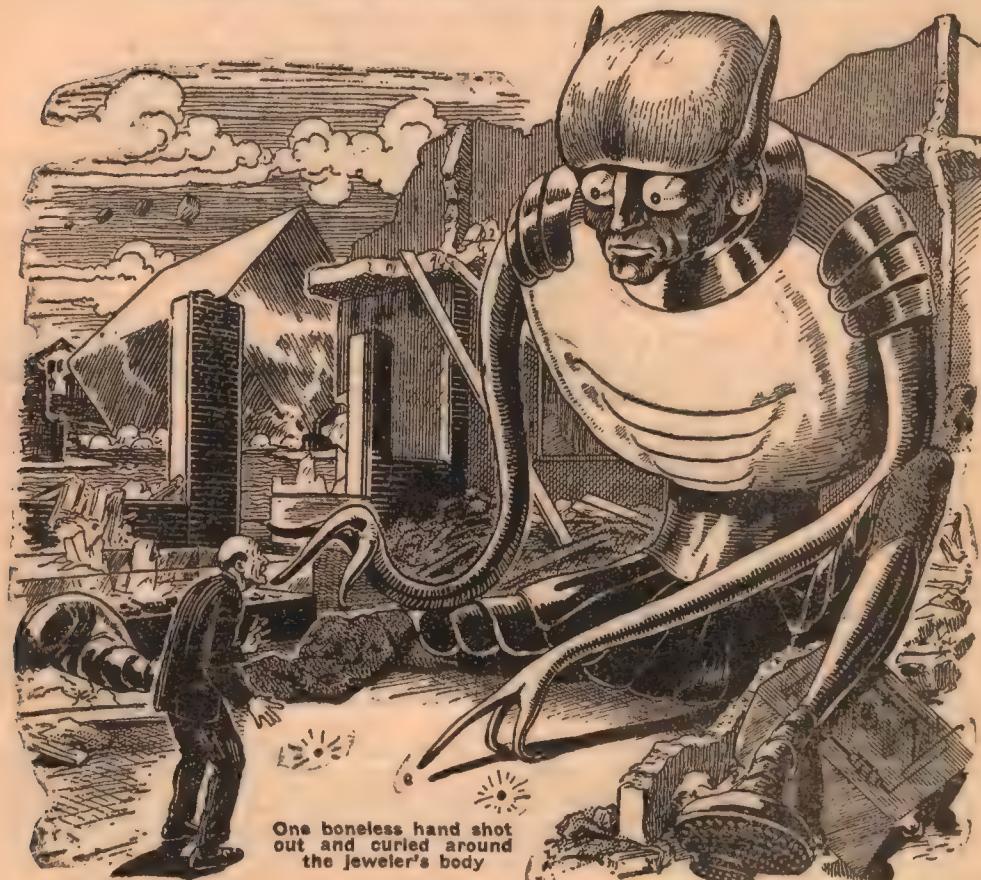
- 30-34—Try Crossword Puzzles.
- 15-29—Stick to Fiction.
- 0-28—Absolute Zero.

Another SCIENCE QUIZ Next Month
Plus SCIENTIFACTS, IF—, THE STORY
BEHIND THE STORY and Many Other Features

NO MAN'S WORLD

By HENRY KUTTNER

Author of "Beauty and the Beast," "When New York Vanished," etc.



**Earth Was Merely the Board for the Deadly Chess Game
Between Two Mighty Civilizations!**

A Chapter from HIGHLIGHTS OF THE TWENTIETH CENTURY, a chronicle of the notable events of the past one hundred years, by F. Charlton Potter, leading journalist-historian of the early Twenty-first Century.

IT is difficult, even now, to set down with unprejudiced accuracy the history of the Invasion. To begin with, the word itself is a misnomer. The Aliens whose iron feet trampled upon a prostrate and bleeding Earth held no animosity toward us. That we know. But the result was no less cataclysmic. Had it happened a few centuries ago,

men would have thought that the comet that blazed whitely in the skies was a portent of the forces that were to come. Instead, scientists worked busily in their observatories, peering into their telescopes, making spectroscopic analyses, taking photographs of Mander's Comet.

It was Dr. Jules Mander who first saw the comet, from his station at Mount Palomar. Later, newspapers ran brief columns about the celestial visitant, and there were articles, luridly illustrated, in the Sunday supplements.

The comet was a newcomer to our Solar System, deflected from its orig-

inal course, probably, by some massive body perhaps beyond Andromeda. But its new orbit indicated that it would be a periodic visitor, returning to circle our Sun once every seventy-five years. Mander's Comet—remember it. For it was the herald of the approaching doom.

At the time we in America saw doom elsewhere. All over the world the war-god shouted and swung his red sword. The Second World War had become a blind juggernaut. A haze of battle hung over Europe and the Orient. Every power in the Eastern Hemisphere had been drawn into conflict, and the cannon thundered day and night.

The soil drank blood thirstily. It was a war of bitterness and hatred, of extermination. The Western Front flamed into a holocaust. Between the Siegfried Line and the Maginot Line lay a stretch of land on which men could not live, but died, very horribly.

The guns bellowed. In America we heard them distantly. Life went on for us much as usual. Youngsters skated in Central Park, parades marched down Fifth Avenue on holidays, sleek-shouldered women danced with impeccably-clad men in the Rainbow Room, the Ritz-Plaza, the Astor. New stage-plays opened. And a film called *Men of Tomorrow* had its world première at the Metropolis Theatre in New York.

That picture was shown only once, and it was stopped almost before it had begun. Summit Studios, of course, lost a great deal of money on the film. They had advertised it for months as an entirely new technique in movie-making, superior to magnafilm, multiplane, or any of the attempts to make the screen three-dimensional.

The actual method Summit's technicians employed was never revealed, but it is obvious that both the screen itself and the method of projection were unusual. The screen was composed of innumerable layers of fine mesh, made of a rubbery plastic.

The light-beam, too, was notable, combining as it did the unseen ultraviolet and infra-red with visible light of normal vibration. Summit Studios spent millions on a wide-spread advertising campaign and admission to the première was by invitation only.

Socialites and critics were given the preference. Special airplanes had flown from Hollywood, loaded with stars, producers, directors, and the elite of the cinema metropolis. Television trucks waited outside the theatre. Broadway blazed with searchlights. The marquee carried the legend:

WORLD PREMIÈRE
MEN OF TOMORROW
ALSO LATEST NEWSREELS OF
EUROPEAN WAR

Movie stars gulped happily into microphones and signed autograph books. Directors and producers told how happy they were to attend the première. A mob filled Times Square, so that traffic had to be re-routed via Sixth and Eighth Avenues. On the Times Building a strip of electric bulbs flashed the latest news.

"Thousands flock to witness new Summit film . . . General predicts victory soon . . . Twenty planes shot down above English Channel . . . Scientist declares Mander's Comet emits radiation similar to cosmic rays. . . ."

In the sky, unseen amid the glare, hung a ball of fire, its tail stretching away from the Sun.

At the microphone, a sleek announcer was introducing notables: "Miss Janice Arden, glamour star of Hollywood, and her escort is Dan Darrow . . . General Orney, folks. He flew from Washington just to attend this première. And here's little Betsy Fenwick, five years old, but every inch a star. And . . ."

GENERAL Horace Orney went to his box inside the theatre and sat down in lone dignity. He was a handsome, elderly man who looked remarkably impressive in his uniform. Now he lit a cigarette and stared down at the audience, nodding occasionally as he saw someone he knew.

There was Jack Hannibal, another Army man, with a luscious blonde. Jack always had good taste, the general thought, and shifted in his seat. The auditorium was darkening. The curtains rolled aside from the screen.

The audience remained quiet until, suddenly, the figure of a man was flashed on view. He was the star of the picture, and a storm of applause

greeted his appearance. His image, everyone noticed, was three-dimensional, apparently real. The flat, planar surface of usual film projections was entirely absent. Summit Studios had actually achieved their aim—three dimensional motion pictures!

The star made a speech, bowed, and faded from view. *Men of Tomorrow* began. The picture itself was impressive—based on a popular fantastic novel that had recently appeared, and filmed with all the technical tricks at Hollywood's command. The time was in the distant future—and, incredibly, it was like looking through a window into reality.

General Orney settled back into his seat and lit another cigarette. He did not put the white cylinder between his lips. Instead, he leaned forward, frowning.

Something was wrong. The picture blurred and went out of focus. The sound-track failed, and then went on again as a high-pitched, shrill hum-ming.

A chuckle went up from the audience. The projectionist was having trouble, of course. In a moment the picture would resume its course. . . .

It didn't. The screen went a curious, indescribable hue. The shrilling rose to an ear-piercing wail. People moved uneasily, vaguely disturbed by the high pitch of the tone.

Then the screen—was gone! In its place glowed a misty square of fog—an inexplicable wall of dim light. And against that extraordinary background two gigantic figures stood.

The two weird figures, each one nearly twenty feet high, stood still, apparently gazing directly at the audience. Critics glanced at their programs and then back to the "screen." Still the giants stood unmoving.

Monsters they were, with grotesquely gigantic, bulbous skulls and huge luminous eyes. Their long, three-fingered hands and arms seemed boneless. Their stiltlike legs supported lean hips and vast barrels of chests, clad in some odd sort of armor.

Someone in the audience was making frantic gestures back at the projection booth. In his box General Horace Orney's eyes narrowed as he noticed

Jack Hannibal, after a brief whispered word with his companion, the blonde, suddenly rise and walk down the aisle.

The giants moved. The tentacular arms swung purposefully. A man in the front row stood up and tugged nervously at his companion's hand.

Then it happened.

The monsters stepped out of the screen!

It was so utterly unexpected, so fantastic, that it partook grotesquely of humor. By some strange psychological quirk, a ripple of startled laughter ran through the audience. A clever new film-shock had been created by Summit, they thought. . . .

THE laughter stopped when the man in the front row yelled in fear and started to run. He didn't get very far. The larger of the two beings reached down and picked up the human in boneless fingers. Jack Hannibal, in the aisle, hesitated and shouted, "Stop the film! Quick!"

The cry attracted the attention of the other monster. A long-tubed gun appeared in its hand. It strode from the screen and sent a beam of light lancing toward Hannibal. The Army man clutched at his heart, moaned, and fell.

General Horace Orney found himself cursing in a low monotone as he pumped bullet after bullet from his heavy automatic at the nearer of the creatures. The being ignored him completely. It was fingering its captive curiously. The audience yelled and stamped.

The light from the projection booth flicked off, but the giants did not disappear. The one who carried the man turned and stepped back a few paces. Its body seemed to melt into the screen and vanish. The other began methodically to ray down every living being in the theatre. General Orney crouched below the rail and fired ineffectually until his ammunition was exhausted. The monster was invulnerable, or seemed so. It was striding here and there, crushing rows of chairs under its heavy-shod feet, the huge eyes searching for new victims.

Finally there were no others. The giant turned, just as Orney rose from a crouching position and took careful

aim. He waited as the being came slowly toward him.

There was one bullet left.

Orney fired it at his opponent's eye. He did not miss, but the missile did not the slightest harm. The general hurled the automatic at the monstrous, alien face.

Still the creature stood regarding him. It made no move. There was a cold, dispassionate curiosity in the great eyes, and a touch of something else—a hint of horror, a breath that blew coldly out of the Unknown and chilled Orney. He realized, suddenly, that he was no more to this creature than an ant. . . .

Cautiously, the general drew back. He moved slowly to the drapes, hesitated, and sprang into the passage. The monster did not try to stop him. There was silence in the auditorium as General Horace Orney raced for safety, the cold sweat drying on his cheeks.

"Washington!" he was thinking. "I must phone Washington—"

A frightful grinding shock rasped through Orney. He was blinded and deafened with shattering light and sound. He felt the floor give beneath his feet, and a sharp agony constricted his lungs. In that last moment of dissolution, before death claimed him, he tried to shout warning. . . .

Times Square vanished at that moment. For a distance of half a mile ruin shook Manhattan. A dome of light, with the Metropolis Theatre as its center, sprang suddenly into being. A hundred feet high, like an inverted bowl of shimmering whiteness, it appeared. Everything within that bowl was destroyed instantly, shaken into atomic nothingness. Skyscrapers, cut in half, crashed down and vanished into the dome. Then silence, broken by terrified screams and the wailing of police sirens.

Thus the Terror came to Earth.

INEVITABLY, men put forth theories. The Titans came from another dimension, science speculated. They came from a plane interlocking with ours, but vibrating at a different intensity. They were bent on conquest of the Earth, extermination of all mankind. So the wild theories ran, while

New York was frantically evacuated and bombers circled to drop high explosives on the dome of light.

Huge guns shelled the thing. But the Titans paid not the slightest attention. And, exactly thirty-four hours after their advent, a fleet of strange aircraft emerged from the shining hemisphere they had erected in Manhattan.

One by one their ships came, shooting up through the glowing veil and racing off eastward across the Atlantic. They were cigar-shaped and featureless. They fled over the British Isles and war-torn Europe and came to rest in Siberia.

Anti-aircraft shelled them. But the Titans were impregnable. In Siberia they created another light-dome, into which their ships vanished one by one. That was all.

Puzzled, fearful, the world waited. Now there were two inexplicable hemispheres of shining brightness—both meaningless! Almost thirty hours we waited before the ship reappeared.

Not all of them—scarcely a third of the original fleet emerged from the Siberian dome, racing desperately westward back to Manhattan. They never reached it. From that cryptic, impossible hemisphere came hundreds of ships entirely different in construction from the Titan vessels. These were great cubes, hundreds of feet square, that shot after the escaping craft and destroyed them in a great battle over the Atlantic.

Ships saw the conflict and radioed back reports. They got startling news in return. From Jersey came the word that literally thousands of the cigar-shaped ships were plunging up from the Manhattan dome and rocketing into the west.

Russia declared that more and more of the square aircraft were emerging from the Siberian light-hemisphere. The sky was black with them. Cubes and spindles battled each other in a fearful holocaust that shook the Earth. They fought with rays and with vibrations. Man was forgotten.

Presently both fleets withdrew. It was guerilla warfare now, and it spread out over the world. Cubes and spindles were shattered and sent plunging to destruction below. In the broken ruins

we found bodies. The Titans we already knew — great-headed, barrel-chested beings with flesh hard and icy as metal. All we found were dead.

In the smashed cube-ships were other creatures, utterly inhuman. They were merely globes, ten feet in diameter, with a dozen limber tentacles sprouting from their bodies in no regular arrangement. Of other visible organs they had none. Their flesh glowed with pearly luster. They were silicate life, instead of carbon. Living crystals—a strangely evolved form of existence!

Naturally, during this war between the spindles and the cubes, the European conflict stopped. Governments forgot imperialism and trade to fight the common enemy. Siegfried Line and Maginot Line were deserted. The guns were aimed skyward. But, paying no attention to humanity, the Titans and the Silicates waged their war, and cut a swath of destruction wherever they passed.

Rays from the ships crumbled buildings to powder. Cleveland, Paris, San Francisco, Constantinople, Tokyo, and other cities were partially or completely destroyed. There was no malice toward Earth in the gesture on the part of the aliens.

The cities just happened to be in the way.

TO a man named Curtis Grover, a jeweler in a small Mid-western town, we are indebted for what little we know of the Invaders' motives. An air battle took place above his village. Buildings were shattered into nothingness. Grover saw ships falling from the sky and fled into the cellar beneath his jewelry shop.

It was sheer luck that Grover was an educated man—a bibliophile, a linguist, and a scholar. He was fifty-three at the time, a lean, gaunt, bald-headed fellow whose face was a network of wrinkles in sallow skin. He hid in his cellar, listening to the war-thunder fade and die, and presently he heard a thumping noise from above. Someone had entered the shop—wounded, Grover thought. He climbed the stairs to investigate.

It was one of the Titans. One of his legs had been smashed into pulp, and

he was looking over his shoulder toward the doors and the smashed windows. Grover, at the top of the stairs, made a choked sound of fear, and the Titan turned and saw him. One boneless hand shot out and curled around the jeweler's body. He felt himself dragged forward, and incontinently fainted.

Grover awoke to find himself lying on the floor, with the Titan squatting beside him, a bizarre, terrifying figure in the growing twilight. What thoughts entered Grover's mind then we shall never know. He sprang up and fled; the great hand shot out, drew him back, and released him. Again Grover ran—again he was pulled back.

This occurred several times. Then the Titan, still clutching his victim, paused and cocked his great head as though listening. The lidless eyes were focused again on Grover, and, eerily, the jeweler felt a curious sense of motion within his head. A finger of ice seemed to be probing into his brain. His thoughts went off at random.

He felt, he says, as if he were looking through the wrong end of a telescope, or going under an anaesthetic. The feeling passed. And a voice spoke inside *Grover's mind*.

It was telepathy, we know now. The jeweler, an educated man, guessed that after a minute. Yet the development was no less nerve-racking for a logical explanation. There was a flurry of confused thoughts in Grover's brain, and he sensed incongruous emotions—fear, wariness, and a sort of ironic amusement. He knew, or sensed, what the Titan was thinking.

The creature had survived the wreck of his ship. His squadron had been destroyed by the Silicates. One of the cube-shaped vessels was still patrolling the sky overhead, looking for traces of life. Until it left, the Titan was trapped. He could not send for aid, since his message would be detected by his enemy.

But, after a time, the cube-ship would leave, and then the Titan could ask for help, and his own race would come to rescue him. In the meantime, the giant was bored, and this anthropoid, oddly-shaped creature amused him. It was intelligent; after a fashion. It was

full of fear and curiosity.

Grover had been in the First World War, and remembered, rather shockingly, a day when he had cowered in a shell-hole, in the company of several corpses and a small rat. He had caught the rat and passed the time by playing with it—feeding it crumbs of biscuit and chuckling at its antics. Grover sensed a feeling of ironic amusement. The Titan had caught and appreciated his thought.

BLIND resentment surged up in the jeweler. He struck futilely at the hard arm. The Titan bent his bulbous head; his shining eyes contemplated the Earthman.

Sanity returned to Grover. He forced himself to calm. This was a golden opportunity. If he could manage to communicate with the Titan—make friends with him, or even secure information—the Army might be able to make use of whatever he found out.

Amused, the giant seemed to applaud mentally.

"Who are you?" Grover said, aloud. "Where do you come from?"

Then he screamed in sheer agony at the pain inside his head. A flood of monstrously alien thoughts poured into his brain. The Titan was quite willing to explain—but Grover could not possibly comprehend the abnormal, un-Earthly thought-pattern of his captor. An Australian bushman would get a headache trying to understand Euclid, even though Euclidean laws are based on familiar principles of this world.

The throbbing in Grover's head passed. He became aware that the Titan had reached into a showcase nearby, breaking the glass, and had brought out a handful of gems. The Titan selected three of the gems, tossed the others carelessly aside. Then the alien did a strange thing. On the floor, directly before the jeweler, he laid in a row a ruby, a pearl, and a diamond.

Blood ruby—rose-pearl—sparkling diamond. In a straight row they lay. As a man might set out wooden blocks to explain the alphabet to a child.

The pearl was in the middle. The Titan pointed to it.

"This is your world," his telepathic message told Grover. "Do you under-

stand? Your world lies in the middle."

Fantastic nightmare! The shadows darkened within the little shop. The grotesque form of the giant was unreal. He touched the diamond.

"This diamond represents my world. My world touches yours, interlocks with it. But only in hyper-space, in a different dimension. My world and yours are normal three-dimensional space, however."

Grover had read of such theories. He nodded his understanding.

The Titan indicated the ruby. "This—this gem is still another world. Those you call the Silicates come from it. Now we have three worlds, touching only in a fourth dimension, lying in a row. Silicates—the ruby. You Earth people—the pearl. And us—the diamond.

"Now," the explanation went on, "suppose you lived on the diamond and wished to reach the ruby, and you could only travel in a straight line. How could you do it?"

Grover understood. "By passing across the pearl," he answered.

"Exactly. That is why we Titans must pass through your world to reach the planet of the Silicates. We cannot enter directly the vibration-plane of the Silicates. We must first cross your world."

"But why?" Grover burst out. "I don't understand! This senseless war—"

"You know nothing about it. We did not start the battle. We are fighting for our lives. We must kill the Silicates, or they will kill us."

The jeweler shook his head.

YOU invaded them," he said stubbornly.

"Wait. I have said that three-dimension objects cannot pass directly from the Silicate world to ours, or the opposite. But certain radiations can go from one plane to the other, without detouring through your planet. Lately the Silicates have made use of a new form of energy to power their machines and cities. This energy is not harmful to them, but its radiations destroy us. And those rays, in some strange manner, are transmitted from the world of the Silicates to ours, and kill us. We have asked them to stop using this

power, and they will not.

"So," the Titan finished, "we must kill them before their deadly radiations kill us. Our invasion of the Silicates was quite justified."

Grover tried to comprehend.

"But won't they make some concession?"

"They say that they need the power. If they stop using it, there is no substitute, and without power they will die. So, of course, we are fighting for our lives."

The Titan paused for a moment, seemed to listen.

"The enemy ship has gone now," he told Grover. "I must send a message for help." He was briefly silent, and then relaxed. "Good. A ship will be here shortly to pick me up."

"What about me?" Grover asked fearfully. "What do you—"

"You?" There was faint surprise in the Titan's transmitted thought. "I see you expect me to kill you or capture you. But why? What are you to me? You amused me in an hour of boredom; now you may go." The giant turned his head toward the front of the shop.

The jeweler bit his lip. "But you're destroying the Earth!"

"We mean you no harm. It is better that the Silicates fight us here, rather than we permit them to invade our own world, destroy *our* cities. We must drive them back to their world, and then annihilate them."

A random thought came to Grover. The Titan caught it and nodded.

"You are wondering about our first advent — through a moving picture screen. For many years the Silicates and ourselves have been trying to break into Earth's dimension. But there was no door—the gateway was locked from your side. However, when your picture people exhibited their show, new vibrations in the light thrown upon the theatre screen, together with other rays that came from a comet that recently entered your Solar System, helped pierce the barrier separating our worlds."

"We cannot enter your world unless you open the door for us—at the right time. Perhaps, later, we may be able to break into your continuum without

your inadvertent cooperation, but the radiation of the comet—you call it Mandar's Comet—is vitally necessary."

Grover went off at a tangent.

"Suppose you could supply the Silicates with some other source of power? Like electricity? Do they have that?"

"They use an atomic force that liberates quanta . . . Electricity? What is that?"

The jeweler tried in vain to explain.

"There's a powerhouse at the dam nine miles to the south," he said finally. "Perhaps—" He gave explicit directions for reaching it.

The Titan nodded. "We shall investigate. This electricity is something new to us. It may not be able to operate in the world of the Silicates. But if it does, and if they consent to use it—"

He rose and went out of the store. His thought floated back to Grover. "My ship has come for me. Good-by."

The jeweler sat for a time in silence. Then he went into the street and stood looking at the sky, where a spindle-shaped ship was disappearing toward the south.

"Electricity," he said aloud, musingly. "Perhaps—"

He walked toward a parked car that had miraculously escaped destruction. He had to reach the right authorities. They'd know what to do. In Washington, men would understand. . . .

BUT meanwhile death rained from the sky. The Silicates and the Titans fought with terrific weapons. Mandar's Comet crept toward the Sun. And from Washington radio messages went forth carrying the news that Grover had brought, and suggesting moves.

We were an ant-hill in No Man's Land. Opposing forces trampled us and ignored us. We were negligible, unimportant. This was—No Man's World! Earth was the bridge between two dimensional civilizations — and they fought their battles on that bridge!

All the scientific and military forces swung into action, but the results were less than nothing. We managed to salvage a few weapons from the wrecked Titan and Silicate ships, but, on strict orders, we kept these secret and hidden.

The watchword from the governments was—"Wait!"

Wait—for what?

We did not know. The comet crept Sunward. The Titans slowly drove back the Silicates. One day the cube-ships broke and fled in an avalanche toward Siberia. One by one they dropped toward the dome of light and vanished through it into their own world. The spindle-ships followed. What did it mean? A decisive triumph? We were never to know.

Grover, of course, wondered whether the Titans had offered the secret of electricity to the Silicates, and what the response had been. Meanwhile there was respite. Two spindle-ships remained on Earth, one in Siberia, one hovering over New York.

And then—the globes vanished. The bowls of light winked out one night and disappeared completely.

In their place remained curious, weird structures of crystal and metal, standing alone on circles of barren ground. The two ships hovered watchfully over them.

General Robert Hall sat beside Curtis Grover in a bombing plane and watched the sun rise over the Alleghenies. A dozen aircraft circled up into the sky. Hall nodded toward one of the pilots, who spoke briefly into his radio transmitter.

"Ready for the attack?" Grover asked.

"Yes. I shouldn't have let you come, you know. You're a civilian. But you've earned this. Your information—"

The co-pilot left his seat and came back to the others. He was a thin-faced, lean young man who did not look like the renowned physicist he actually was. He sat down facing Grover and the general and lit a cigarette.

"We'll know soon," he said.

"Think so, Stanton?" Hall's voice was dubious.

"It all works out." Stanton sucked smoke into his lungs. "All our experiments point to one conclusion. The gateway into these other worlds is open only when the direct radiations from the comet hit the Earth. Last night Mander's Comet vanished behind the Sun. The solar body blanketed its rays,

kept them from reaching us. Till it reappears, the gateways—the shining domes—are gone. That, I'm sure, is why two Titan ships were left on Earth.

"When the comet returns, as it will in a day or so, the Titans will turn on their projectors and open the gateways again. Of course"—he smiled wryly—"when the comet gets past Pluto, its rays will be too weak to matter, but that'll take time. If we can destroy the two Titan ships and the projectors, we're safe."

GROVER patted his bald head with a handkerchief.

"That's right. The gateways can be opened only from this world. By this time the Titan must know how to reproduce the vibrations released by the movie films. But they still need the help of Mander's Comet."

"I'm leaving the science to you," General Hall announced, frowning at Stanton. "My business is the military. Those weapons we salvaged from the wrecked Silicate ships have been mounted in planes, and they may work where explosives have failed. But ray-guns—" His tone expressed volumes.

"The Silicates destroyed Titan ships with those ray-guns," Stanton said. He looked at his watch. "The Siberian squadron is flying to the attack now, eh?"

"Yes. And here—" The general peered out through the window. Below lay New York. A devastated, bare circle existed where Times Square had once been. Small in its center was a framework of metal and crystal. A cigar-shaped Titan ship hovered there.

"When the comet reappears from behind the Sun, they'll turn on their projector and open the gateways again," Stanton said somberly.

For answer General Hall picked up a microphone beside him and spoke into it. There was a roar of motors. Four planes dived toward the ground.

The spindle-shaped craft hung protectingly over the framework of the projector. It ignored the menacing airships. Explosives would not harm it. Nothing Earthly could.

But the weapons menacing the Titans were not Earthly.

From the first plane a red ray speared out. It wavered, swept in a circle, and wherever it touched the ground, dust clouds billowed up. The Titan vessel did not move from its place, but suddenly a beam of green light lanced up from its hull.

Then another—and yet more.

A plane exploded in mid-air. The general's ship lurched into an air-pocket. When it was again on even keel, the number of attackers had been reduced to four. Red light darted down from them. But it is difficult to aim from a moving plane.

Suicidally one pilot dived. The others followed. They raced down at the torpedo-ship, into the hell of green light.

The red rays probed out. Two ships exploded. Two were left.

And then the Titan vessel seemed to bulge outward. Its hull was ripped into fragments. With a deafening, ear-splitting thunder it was blown apart.

One of the planes managed to come out of its power dive. The other crashed amid the wreckage of its victim.

General Hall looked down, thin-lipped, at the destruction below.

"That's done," he said quietly. "The Titan ship—and the projector. Gone."

The pilot turned, patting his earphones.

"Siberia reporting, sir," he called out excitedly. "We've achieved our objective there."

"All right," the general said. "Back to the airport. Immediately."

Grover glanced at Stanton. "What now?"

The scientist shrugged. "Lord knows. We must wait. All our theories are

based on the premise that neither the Silicates nor the Titans can enter our world until Mander's Comet returns to open the gateway. We must wait. . . ."

And so we waited. Mander's Comet emerged from behind the Sun. Planes circled endlessly over Siberia and Manhattan. Fearfully we waited for news, while keen eyes searched for a reappearance of the shining domes.

The comet passed the orbits of Venus, Earth, Jupiter. Outward it went. It passed Pluto, and we breathed again. We were safe. . . .

Safe? Well, we rebuilt. Devastated cities rose again. And, sometimes, men wondered. What had been the result of the Titans' entry into the world of the Silicates? Who had conquered?

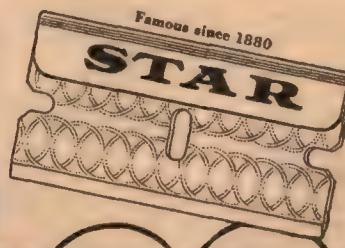
"They may have made peace," Stanton said to Grover as they sat at lunch in the rebuilt Rockefeller Plaza. "After all, the Silicates could use electricity instead of atomic power. They would prefer peace, I think. Both Silicates and Titans were intelligent races. And they were fairly equally matched. In the end, war between them would have meant the destruction of both worlds, both civilizations."

Grover nodded and lit a cigarette as he listened to the scientist.

"The danger isn't over. Mander's Comet has a seventy-five year cycle. During that time the science of the Silicates and the Titans may advance a good deal. Will they find something new to quarrel about? Will they break into our world again? I do not know. I know only one thing—that Mander's Comet returns in seventy-five years. . . ."



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PEBBLES OF DREAD

By

GERALD EVANS

Author of "Crimson Purgatory," "The Man-Stealing Mist"

PROFESSOR CADOGAN, chief of the International Biological Institute of the Immortal Life Seekers, Alaska, methodically handled his spectacles, gently wiped their steamy surfaces in his silk handkerchief. His six assistants, gathered about him, exchanged glances. They had had a hefty morning at the benches. This diversion was not unwelcomed.

Young Ted Lowell adjusted his gleaming red tie, which contrasted vividly with his sandy hair. Jim Keland, the senior, stroked his short beard. The professor replaced his glasses and turned his attention to the letter, upon which lay the four white pebbles. He picked up the letter and smiled.

Professor Cadogan Was Interested in All Forms of Earth's Life—Until an Alien Life From Another World Absorbed Him Entirely!



"Interfere, and I will hurl this vitriol at you," Professor Cadogan said

"My friend Professor Bourchier is not over-communicative on his enclosures. He writes here," said the professor, "What these pebbles are I do not know. Some natives around here who saw them in my laboratory, became quite terror struck. I was told a fantastic story regarding them, which is far too ridiculous to claim intelligent attention, and with which, my dear Cadogan, I will not trouble you.

"These natives are so superstitious. They've even tabooed the valley from which these came. Quite a good thing really, it was an unhealthy swampy place anyway. India possesses these abominable places. They may be of biological interest to you, these pebbles I mean, some kind of gigantic spore possibly."

Professor Cadogan folded the letter.

"If they are spores," he mused, "they will be of interest to us. I'll work on them later."

He pulled back his coat sleeve and turned to the window so that the light struck his wrist watch.

"Well, boys," he said, "that will be enough for this morning."

Lowell lingered and picked up one of the pebbles. He let it rest in the palm of his hand. He studied it closely. Never had he seen a pebble like it. It was three inches in diameter, fairly spherical in shape. It was a gleaming white in color.

Lowell felt uneasy, it seemed that one was not alone in the company of that pebble. A strange dread crept through him. Instinctively, he divined that it was no ordinary stone, no inanimate rock.

He hastily dropped in on the bench, turned, and hurried away from the deserted laboratory.

That night, the professor sat at a binocular microscope, oblivious of time. He was watching a drama performed by his favorite company of players—micro-organisms on the cold stage of the slide.

On the bench, at his elbow, moved a stranger organism. It was one of the pebbles! Now, it had additions to it in the form of four leglike tentacles that propelled it along. Its motion was crablike, its sense of direction delib-

erate. The professor's elbow was its objective.

How could Professor Cadogan feel that sinister caress, as he watched a unicellular episode with bated breath?

The pebble began to climb his arm to the shoulder. Like a thing responding to an age-old habit, it reached the professor's shoulder and paused. One of its fore tentacles waved before it, reaching cautiously for the warm bare flesh of his neck, as though it knew that to touch human flesh would betray its presence.

From the end of the tentacle, a retractile point, like the tip of a hypodermic needle shot out. Professor Cadogan gave a sharp cry, his shoulders went rigid. Then he slumped forward.

MAINTAINING its unhurried progress, conscious of its mastery, it continued its journey. The pebble crawled on to the stricken man's head. It took up a position in the center of the crown. Its two rear tentacles slithered back toward the base of his skull.

Two ivorylike spikes at their tips sank slowly into the bone. The inert professor's hands closed and opened convulsively, a nervous reflex action as though a controlling brain ganglion had been touched.

The fore tentacles of the living pebble stretched forward over the forehead, like the speeded up movements of ivy shoots grafting themselves onto an oak.

The professor raised his head, hoisting the silent entity fixed upon it. The thing had swollen now somewhat. He was conscious of its weight. Instinctively, he placed his hand upon it, and a puzzled expression came over his face. Had he fallen and hit his head against something? The hairless "bump" felt queer to him.

He picked up the telephone, rang the number of Jim Kelland's room.

Two minutes later Kelland came into the laboratory. The professor turned to him.

Kelland's blood chilled. Professor Cadogan paled. Instantly, he grasped the significance of his assistant's expression.

He crossed the laboratory floor swiftly. The suspicion that gripped him was confirmed the moment he beheld that there were but three pebbles on the bench.

His eyes dilated with horror as he turned to his master, who had been following his movements with a growing misgiving.

Realization burst upon the professor. His hand went to the thing upon his head. Delicate fingers, trembling violently, ran along the ruthlessly gripping tentacles.

"Kelland!" he gasped. "It's not true. It's not true. Such a thing couldn't be!"

He crossed to the laboratory window, and studied his dim reflection in it. A terror-stricken face stared back at him, the cause of his dismay reflected in all its bitter reality. It was unbelievable!

He turned to Kelland.

"It's a fixture," he cried, his hand grasping the shiny bonelike structure.

Kelland peered at it. It was easy to see that it had grown larger. Its shape had changed. Two bony protuberances, wide apart in the front, gave one the eerie sensation that one was being watched. Kelland felt uncomfortable. The professor, features ashen with fear, the hideous parasite attached like a smaller head upon him, was a pitiful, as well as a terrible sight.

Professor Cadogan staggered to the bench with the apparatus still assembled from that day's experiments piled upon it. He shook with bitter laughter.

"Why should I despair?" he cried suddenly turning around. "Come, you must help me Kelland," he ordered, sitting down by his microscope. He stared at his assistant. "This thing is unique," he said. "Examine it closely."

Kelland steeled himself for his task. Bending over the professor, he studied the rear tentacles, and ran his fingers along one to its termination in the elderly man's skull. The tentacle was warm, alive!

"Do you feel any mental disturbances?" he asked.

The professor nodded.

"They are difficult to describe," he

said. "I feel that this thing has become part of me. What the devil is it Kelland? I wish Bourchier had told us what the natives said about them."

"It seems to know what it's doing," replied Kelland laconically. "I don't want to frighten you unduly Professor."

THE professor waved his hand impatiently.

"I'm a scientist, we are both scientists, and we must look at this thing scientifically. Speak freely. What do you think?"

"It is some sort of a parasite," began Kelland.

"You mean," said the professor, licking his dry lips, "a brain parasite?"

Kelland nodded.

"That's what it is! By God, what a ghastly thing!" Kelland exclaimed. "It is some weird organism which, through millions of eons of evolution, has developed the ability and mechanisms to attach itself to the heads and brains of living creatures. A malignant organism!"

The professor grunted.

"I think you are right Kelland. It is not strange to nature. In a lesser degree, there are creatures, fish for instance, which attach themselves to sharks in a life-long union, and thus derive the protection and other advantages of the larger creature. This thing seems to be more specialized however. Higher in the evolutionary scale."

"But it will have to be removed from your head, Professor! Its ancestors knew only savage men and animals. But we understand surgery," he exclaimed hopefully.

The professor recoiled. He trembled. His demeanor had changed. Suppressed rage distorted him. Kelland shrank back. There was an insane glint in the savant's eyes. He got up, and with sinister deliberation walked over to the bench where the three other pebbles lay.

He picked one up. Fondled it lovingly. With infinite care he brought it back with him. He held it up for the uneasy Kelland to study.

"Here is another waiting to attach itself to someone's head," he said in an

alien tone. "How long it has waited. Poor little thing!" He petted it. "Very well, my faithful companion, you shall have your turn soon," he soothed diabolically.

Kelland's face paled. He became aware that it was late at night, and that they were alone. The laboratory had become a place of terror. One of the kindest men, and the most brilliant of his profession, was now the agent of a strange unknown.

"You are not afraid Kelland, are you?" sneered Professor Cadogan, placing the sinister pebble on the bench near the microscope. He turned to his assistant. The crafty leer was still evident.

"I feel particularly elated," he went on in that unnatural tone. "Draw your chair up Kelland, I want to show you something. You are not tired are you?" his demeanor was wheedling.

"Let's contemplate Weismann's problem. Are the unicellular organisms immortal? Take one," he went on in an eerie tone. "It possesses an individuality. It multiplies by dividing in two. Are there two new individuals, morphes?

"Weismann's opponents say yes," he mused. "They say death has claimed the original. But where is the corpse? Then take *Clavellina*, that marine creature, an offshoot of the vertebrate stock, specialized in the ability to involve and evolve itself?"

The professor wandered off, and turned to the microscope. He picked up a slide and made adjustments to the stage of the microscope.

"Get your note book ready Kelland!" he commanded. "We must not miss this opportunity."

He peered for a moment into the microscope, and then looking up, he turned to Kelland.

"Come here quickly. I wonder if you can see what I see."

KELLAND, his curiosity aroused, bent over the microscope. With an insane laugh at the triumph of his ruse, the professor seized him by the arm. Kelland lurched erect, wrestled desperately with him. He realized that this fine old man was no longer

himself. He was but an instrument for the fiendish thing upon his head. Terror lent him strength as he observed the professor's wild attempt to place upon his head the other pebble, from which four quivering appendages now dangled.

There came a shout, and Ted Lowell came running into the laboratory.

Frantically, between gasps, Kelland explained what had happened. Lowell remembered his feelings when he first picked up one of the pebbles.

"Grab his hand," shouted Kelland. "Watch that thing!" he warned.

Together, they quickly overpowered the "possessed" man. Lowell obtained the pebble, which immediately wrapped its tentacles about his wrist. Wildly, he raised his hand above his head, and brought it fiercely down on the hard teak bench. The pebble splintered, and the tentacles relaxed their grip. Gelatinous substance oozed out of it.

The professor arose from the floor. His features were soft, kindly. He appeared to be his old self.

"I'm sorry," apologized Kelland crestfallen.

Professor Cadogan smiled.

"You boys did the right thing," he declared, sweeping the back of his hand across his perspiring brow. He gripped the arm of a chair and tottered into it. He lay back, now completely exhausted. Lowell came forward.

"Sorry old man," he said, a lump rising in his throat as he patted the professor's hand, "but we had to do it."

"Good lad, good lad," the professor replied gently. He stared up into Lowell's face. The perplexing furrows on his forehead seemed to ask a mute question. That hideous thing reminded one of a squatting creature of prey that could afford to bide its time.

"In God's name, Professor!" exclaimed Lowell. "What is it?"

The professor's mood suddenly changed. He peered beyond the two men to the apparatus. His eyes brightened, it seemed, when he perceived the ameba tank, a large glass receptacle under the great East window of the laboratory. He got up.

Kelland gripped Lowell's arm.
"Let him alone," he whispered.
"We must find out the nature of this thing."

Professor Cadogan paid no attention to his assistants, but driven by the alien creature, he crossed the laboratory to the tank. He rested his hands upon its edge and peered into the liquid. It seemed that it was the parasite that sought the depths of that tank, not the professor.

"What's up?" gasped Lowell.
"Wait!" exclaimed Kelland raising his hand in warning.

The professor turned from the tank and moved, like one inspired, to the shelves holding countless jars and bottles of chemicals. Methodically, unhesitatingly, he selected a number. Placing them under his arm, he walked back to the tank, and placed them on the floor.

He picked one up, unstoppered it, and carefully poured a quantity into the tank. He repeated this with the other chemicals. At length, he seemed satisfied. The liquid began to foam. Professor Cadogan peered at the thermometer. Seemed satisfied. Then, to the amazement of his two students he began undressing, dropping his clothes to the floor.

Kelland dashed forward.
"Wait, Professor! In heaven's name, pull yourself together man," he shouted. "Don't let that thing beat you."

Kelland was gripping his bare arm. Angrily the professor pushed him away, and before either of his assistants could intervene, he seized a bottle from the floor.

"See this," he raved, holding it aloft. "Vitriol!" he warned. "Don't frustrate me. I seek to harm no one. I wish to give life, not take it. Watch and you will learn something. Interfere, make one move to prevent me doing what I intend, and I will hurl this at you!"

INSTINCTIVE dread gripped Kelland and Lowell. The thought of vitriol burning their eyes and face deterred them. The professor gripped the edge of the tank. Still holding the bottle of acid he climbed with

astounding agility into the bath. The liquid hissed about him. He held the bottle over the side, as though to drop it. He stared at the two men.

"Now," he cautioned, "when I submerge myself in this liquid, a process will begin with which you cannot interfere. If you do, you will be my murderers."

He let the bottle drop. It smashed on the floor, liberating the acid in all directions. Professor Cadogan began to sink into the liquid of the tank.

"At long last," he muttered. "Now we shall see, we shall see."

His mutterings were cut off as his head went below the surface of the potent mixture.

"It will dissolve his body!" protested Lowell. Frightened into action both men rushed forward, but it was too late. Controlled by the sinister entity, the professor lay out on the floor of the receptacle, bubbles rising vigorously from his mouth and nostrils in the clear liquid. Even as they stared, his eyes closed, and a strange peace permeated his features.

"He's dead," stammered Lowell.
Kelland nodded. It was true. The struggle for air had ceased. The hands no longer trembled, and the flesh was already changing color. Thousands of minute bubbles were rising, from parasite and man alike.

"We can't leave him in there," Lowell said. "Let's get him out and smash that thing," he added angrily.

Kelland looked thoughtful. He remembered that threat. Any interference might make matters worse, and yet, surely the professor was already dead!

"Look!" exclaimed Lowell breathlessly.

They both dropped to their knees besides the tank. Before their eyes, the professor's body was shrinking. His feet were contracted towards his head, and the head, together with the strange parasite was moving towards the feet! The flesh of the face was altering.

Kelland gasped!

The face, he saw, was the face of a youth! The lines of age were falling away. The gray hair was changing into a fresh brown. His mouth

began to bulge, and then an event took place which staggered them! The lips were forced apart, and the professor's set of false teeth were ejected, pushed out by the teeth that had grown!

Lowell was gripping Kelland's arm frantically. Youthfulness spread over that body. The face now became boyish, the arms and limbs shrank. The hands became babyish, the fingers were clumsy, nearly unformed. The head was large in proportion to the infant body! The body of the adult professor had now become the body of a child!

Both men watched, amazed. It seemed now, that the unfortunate man's tissues had passed into a state of flux. The pebble creature was changing too. It was being dissolved and absorbed into the greater mass. Lowell turned away. The sight was too revolting. The general shrinking continued. It became a mass of protoplasm, transparent jelly stuff.

Kelland shuddered. That strange thing which had taken possession of the professor was bringing about that metamorphosis. Lowell again averted his eyes, sick.

"What happened, Kelland?" he asked feebly.

KELLAND remained thoughtful. "In the name of Heaven, what's this thing? What's happened to the professor?" he pleaded.

"It looks like involution," Kelland replied after a while.

"Involution?" echoed Lowell.

"Yes," nodded the other. "This monstrosity, this pebble thing, knows the way to involve life. That liquid has the power to cause anything immersed within it to revert to an embryonic stage. All the complicated organs have retraced their steps, becoming simpler and simpler.

"Can you imagine a rose in bloom growing backward, becoming a bud, then shrinking back into the stem, the stem shrinking back into the rose bush, the bush shrinking back into the roots, the roots into the seed?"

"And then what?" gasped Lowell.

"I don't know," he answered.

Still the shrinking went on, until

finally, all that remained of the professor's body and that strange organism was an indefinable blob of jelly. All that mass of the professor's body had dissolved into the liquid of the tank. Minutes passed, in which both men remained spellbound.

What now? The questions hammered away in their minds. What was this process for? Why had the pebble creature combined with Professor Cadogan in that strange manner?

Suddenly Kelland stiffened. A cry froze on Ted Lowell's lips. The process was changing. The indefinable blob of protoplasm was swelling and elongating! They watched it in fascination.

Form came to it. A head, a body and limbs!

Kelland pursed his lips.

"It's growing again," he exclaimed hoarsely. "But why?"

They stared entranced, as the reverse process set in. The body elongated, the face took on character. The hair was jet black. Boyhood gave way to youth, youth to early manhood, and then growth ceased.

"What now?" asked Ted, licking his dry lips.

The answer lay in the tank. The hands of the strange man, so unlike the professor's, flexed and unflexed. The limbs trembled.

Ted shrank back as the stranger began to move in the liquid. His eyes opened, and then, deliberately, he sat up, so that his head and shoulders were above the tank. Of the parasite, there now was no sign. It was now part and parcel of the new being!

Lowell's heart thumped and he shook his head like a drunken man attempting to shake himself sober. He felt for his revolver. The naked stranger, staring at them quizzically, stood up. He began to climb over the edge of the tank as the two scientists shrank back.

His well-formed, marble white foot tentatively sought the steel edge of the stand supporting the tank. Lowell's pulses raced. This thing was fantastic, a negation of nature's laws! A man had died, dissolved in chemicals.

And from the material of that dead man and a mysterious pebble had emerged this, a new man.

The stranger stood on the floor facing them. It was too much for Lowell. He drew his gun, as the naked man came toward them.

"Keep back, keep back or I'll shoot," he shouted.

Kelland extended a restraining hand on the arm of the frenzied man, but it was in vain. The reverberations of a discharged pistol crashed about his ears. The stranger staggered back against the tank, his hand went to his left side, blood trickled between his fingers. A look of bewilderment, of intense hurt, spread over his face. Kelland rushed forward to help him, but the stricken man sagged to the floor. Kelland knelt beside him.

REPENTANT, Lowell came and stood over them.

"You idiot!" fumed Kelland. "Get me a bowl of water and the first aid box. Quick! He's bleeding to death."

Lowell rushed to obey.

"Thanks," said the stranger, as he struggled to sit up. "Now that I have the guise of your species I have earned your mercy. As a pebble creature you loathed me." He sighed.

Kelland stared at him amazed.

"You are wondering what has become of the professor?" he asked. He laughed bitterly. "I have reshuffled his protoplasmic cards."

Kelland frowned. Lowell returned and placed the first aid outfit and a bowl of water on the floor near him. Kelland began to bathe the wound with the ice water in an endeavor to staunch the bleeding. The stranger smiled.

"It is too late, too late," he muttered. "It is a cruel misfortune. The poor boy should not have shot me. I have attained biological immortality, but against accident like this I am mortal."

He stared at the sponge Kelland plied against his side.

"It's useless," he went on. "I am to die. Listen to what I have to tell you. There is so little time."

"We came from a planet of an outer

sun a long, long time ago."

He sighed. His eyes went misty. He seemed to conjure up visions of a past world before him. He roused himself. Lowell had sunk to the floor beside them. The stranger smiled at him, a forgiving gesture. Instinctively, Lowell grasped his hand. The stranger returned it warmly.

"Yes," he sighed. "It was a long time ago when we left Amol. We came in little space ships, small spore creatures in steel tubes barely a yard long. Some of us were sent in opposite directions, but our quest was the same. We came to find a higher type of life, to immortalize ourselves in the highest product of evolution we could find."

He exclaimed sharply.

"It hurts. Don't bother. You can't do anything."

He pushed Kelland's hand away, took the sponge from him and held it on the wound.

"Our planet is larger than yours," he went on. "The creatures are smaller than here on Earth. Unlike you, however, it is the parasites that have evolved intelligence. We were the highest type. We lived generally upon the heads of the Bonyan, a small ape like creature, attached to them, as I was to the professor."

"In this way, we were saved the life wasting eternal searching and fighting for food. Through evolution we practically became auxiliary brains to these primitive Bonyans, but we always maintained our individuality, and when necessary we could seek new hosts. But we were severely handicapped. The Bonyan was the highest type of creature on Amol, but its intelligence was small, and we were at the mercy of its blind reactions to its jungle environment."

"Often our hosts were killed by other wild animals. Sometimes we escaped to seek other hosts, but always we were at their mercy."

"We could communicate with our kind upon other Bonyans by means of telepathy. When our host was well fed and restful, we could influence it by direct communication through the nerves running through our tentacles into its brain. And whatever

we willed it would do within the limits of its own being, of course, in the same manner as I controlled the professor a little while ago. But those limits were narrow, and it seemed that unless we found a higher kind of host we would never progress.

"Our cousin species, the Cilians, who lived in the sea as parasites upon fish creatures, had been occupied with another problem. They sought to defeat death and attain immortality. Through a discovery made thousands of years prior they had attained it.

"There existed a lake upon our planet which possessed an accidental combination of chemicals, that brought about a peculiar phenomenon to any living thing immersed within it. Some of our ancestors, going up a river to the spawning grounds, entered this lake, and underwent a change. The process of growth was reversed! Instead of evolving to maturity and old age, they reverted to embryos, and then began to grow again! It was as though outraged Nature asserted Herself after a while, and the biological pendulum swung back."

HE looked intently at his listeners to see if they understood.

"The Cilian scientists grasped its significance and importance. Here, it seemed was the defeat of death!

"Soon, our scientists learned the combination of the chemicals in that lake. I used the formula in that tank. They experimented. But a terrible thing was discovered! The Cilians who went through the process of involution, regrew into new Cilians who knew nothing of a former existence!

"It appeared that involution set the protoplasmic cells loose in a free flux, the drive of growth and the individuality of the organism was absent. When growth again set in, it was along a new path, as though there had been a reshuffling of the chromosomes and genes which make a particular individual's personality.

"But the Cilian scientists refused defeat. They discovered a way of preserving the memory cells of the organism as it went through the invo-

lution process. They discovered that if a certain substance was injected into the retention ganglion, it resisted involution, and when the new Cilian emerged it still retained the old part of its brain responsible for memory.

"Thus would it remember its past existence! Immortality was achieved. When the Cilian body aged, it went through involution, and regrew to a youthful stage with the retention cells of its former life intact. It is found that once a portion of the brain had been treated with this substance it remained for ever immune to the involution mixture. My memory ganglions were treated eons ago."

The stranger paused to regain his laboring breath.

"Well," he continued, "our next problem was to improve our hosts for our benefits. We tried involution on the Bonyans hoping to improve them, but they re-evolved true to type. Determined to attain a higher form of life, now that we possessed the priceless treasure of immortality, we carried our experiments further. A brilliant Cilian biologist of centuries past suggested that parasite and host should go through involution together, and re-evolve combined.

"The first experiments resulted in death for both organisms. But research found a way. A method was invented by which the re-evolving Bonyan would absorb the cells of the Cilian, accept the retention cells of the Cilian's brain. After countless experiments, a being was at last evolved which had attached to its own brain, the memory ganglions of the Cilian. That's what I am at this moment, an additional ganglion to the brain of this new man, re-evolved from the professor's protoplasm."

Kelland and Lowell bent closer to the dying man.

"But the success was only partial," he went on. "We still found ourselves restricted within an unwieldy body. The Bonyan had its own individuality, its primitive unsublimated instincts. Destroy those we could not. We were imprisoned within the base brain of a crude ape creature! We certainly had more control over it than when we were an

external parasite. Indeed, we felt quite a part of it. But what could one do with a body evolved to climb trees, claws to tear enemies to pieces, and hair and coarseness to destroy the sensitivity of the hands we craved?

"The scientists did not surrender however, and many grotesque beings were evolved. But the deadlock persisted. We would have had to wait millions of years for evolution to evolve the perfect creature. We were impatient. For eons we waited. Then fortune came our way. We were invaded by robot creatures in small space ships!

"Something in our atmosphere caused their metal bodies to rust. Soon we found ourselves with several thousand space ships and no one to claim them! We studied those strange craft. It took us years to understand them, but we learned. They were automatic in their operation. Within them were mechanisms that reacted if they approached too close to incandescent matter, so that they were repelled by near stars, and through a kind of thermo-static control drawn to cosmic bodies possessing low temperatures.

"They were propelled by atomic blasts. Soon we had complete mastery of them, and made experimental flights. We found only robot life on our neighboring planet.

THEN it was decided to make a more extensive exploration. Our space ship came for the Solar System. We struck the Kellib Valley in India, some twenty years ago. It

was a fortunate place for us. Superstition discourages investigation. The heated and moistened air stimulated us to grow to a stage where our propelling appendages emerged.

"We all found human beings to live upon in the primitive external way. I was fortunate in my host, almost as fortunate as I was with the professor. I came across an exploring English geologist in the Kellib Valley. I tapped his brain and lived on him for several years. He could not remove me, as I influenced him against doing that. I did the same thing with the professor when you suggested a surgical operation for my removal tonight.

"All the time I waited, hoping that an opportunity would arise to enable me to try the great experiment. I knew that at last I had found the higher being we needed. I was handicapped, because I could not find the chemicals to make the involution mixture, until I found myself here in this laboratory."

The stranger was failing fast now, his shoulders drooped.

"Here at last was success!" he sighed. "Immortal life, and a perfect being to combine with, so frail, so tender, so sensitive. You are a noble species. You are capable of intense feeling and great artistic achievements. Carry on, carry on where we have left off. Analyze the mixture in that tank. Perhaps too—" he raised his head in appeal—"in your mercy, you will help my fellow creatures on distant Amol."

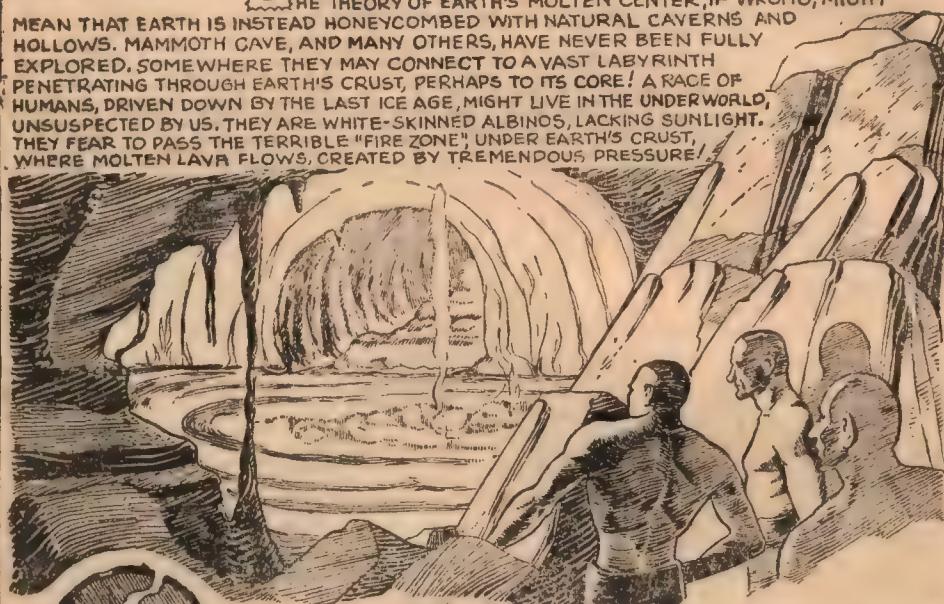
He slumped to the floor.



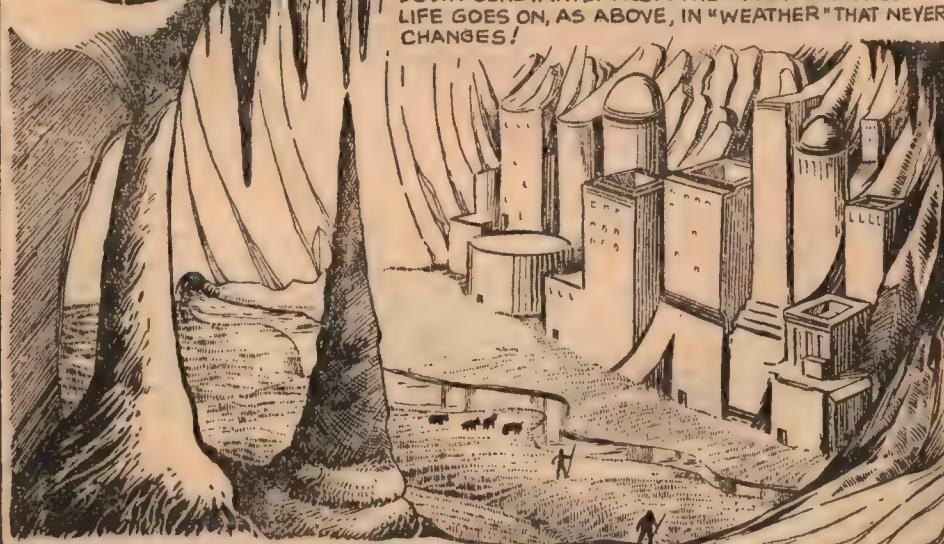
III
R

ANOTHER RACE LIVES AT THE EARTH'S CORE

IHE THEORY OF EARTH'S MOLTEN CENTER, IF WRONG, MIGHT MEAN THAT EARTH IS INSTEAD HONEYCOMBED WITH NATURAL CAVERNS AND HOLLOWs. MAMMOTH CAVE, AND MANY OTHERS, HAVE NEVER BEEN FULLY EXPLORED, SOMEWHERE THEY MAY CONNECT TO A VAST LABYRINTH PENETRATING THROUGH EARTH'S CRUST, PERHAPS TO ITS CORE! A RACE OF HUMANS, DRIVEN DOWN BY THE LAST ICE AGE, MIGHT LIVE IN THE UNDERWORLD, UNSUSPECTED BY US. THEY ARE WHITE-SKINNED ALBINOS, LACKING SUNLIGHT. THEY FEAR TO PASS THE TERRIBLE "FIRE ZONE" UNDER EARTH'S CRUST, WHERE MOLTEN LAVA FLOWS, CREATED BY TREMENDOUS PRESSURE!



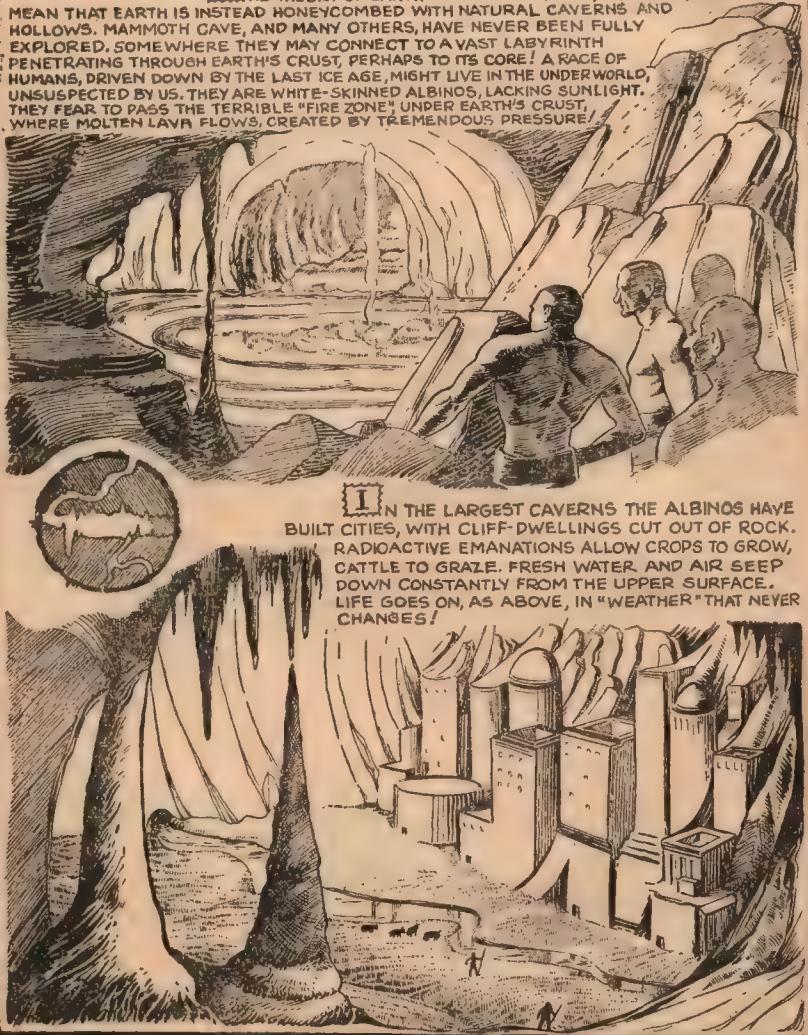
IN THE LARGEST CAVERNS THE ALBINOS HAVE BUILT CITIES, WITH CLIFF-DWELLINGS CUT OUT OF ROCK. RADIOACTIVE EMANATIONS ALLOW CROPS TO GROW, CATTLE TO GRAZE. FRESH WATER AND AIR SEEP DOWN CONSTANTLY FROM THE UPPER SURFACE. LIFE GOES ON, AS ABOVE, IN "WEATHER" THAT NEVER CHANGES!



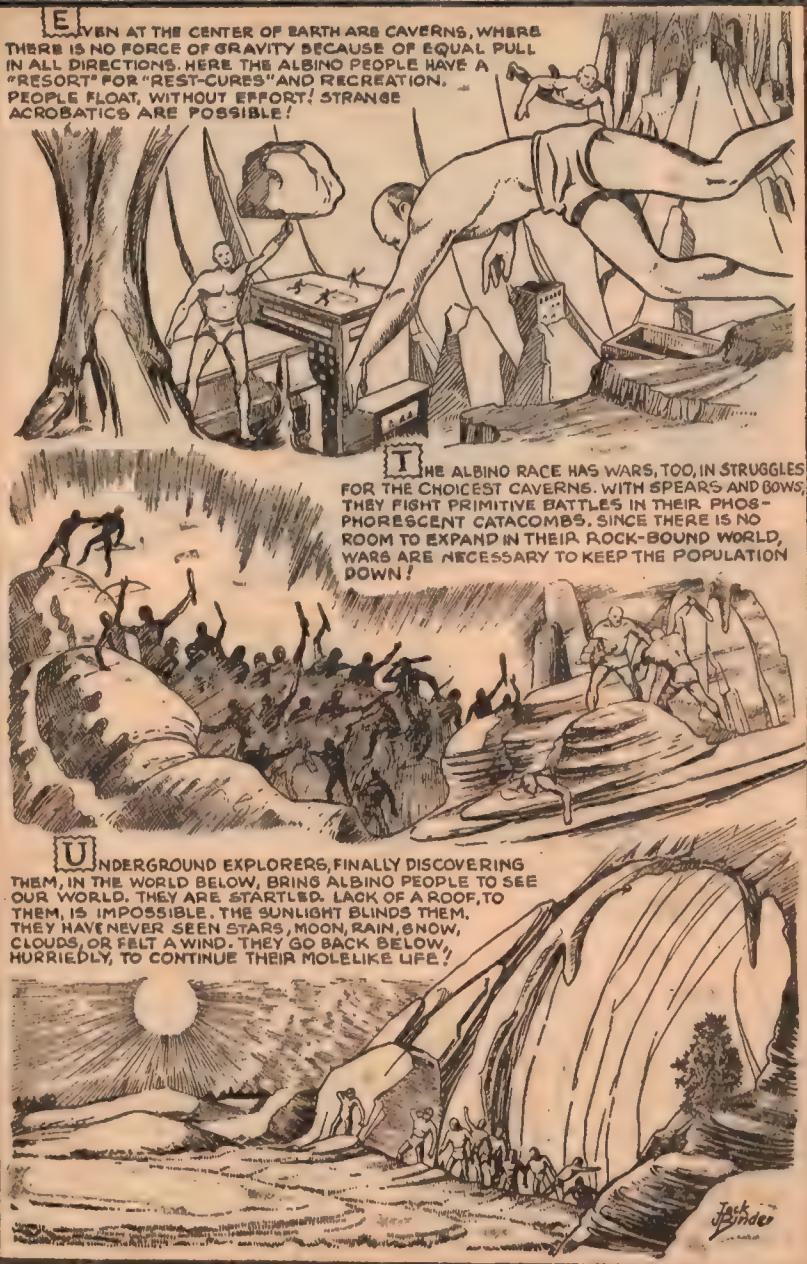
COMING NEXT MONTH: IF PLANT

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COMING NEXT MONTH: IF PLANT



LIFE REVOLTED

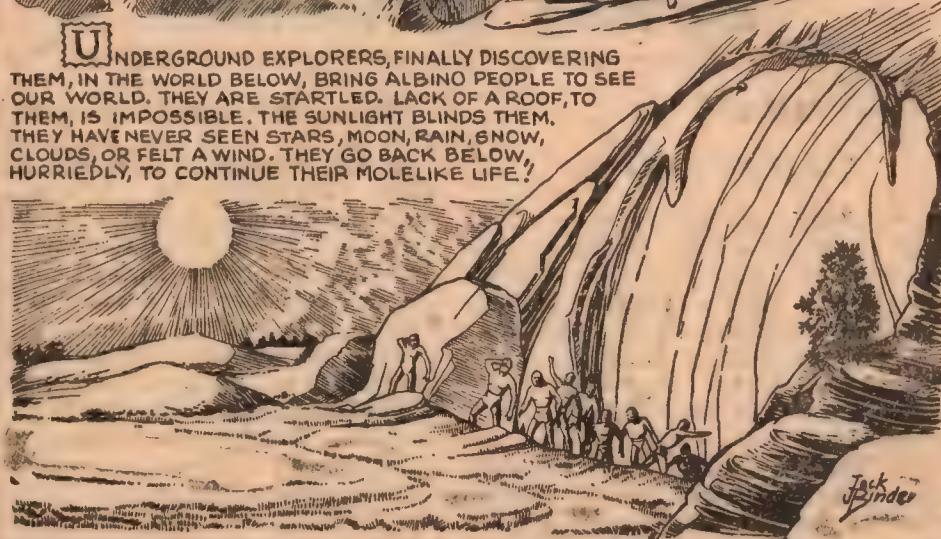
EVEN AT THE CENTER OF EARTH ARE CAVERNS, WHERE THERE IS NO FORCE OF GRAVITY BECAUSE OF EQUAL PULL IN ALL DIRECTIONS. HERE THE ALBINO PEOPLE HAVE A "RESORT" FOR "REST-CURES" AND RECREATION. PEOPLE FLOAT, WITHOUT EFFORT! STRANGE ACROBATICS ARE POSSIBLE!

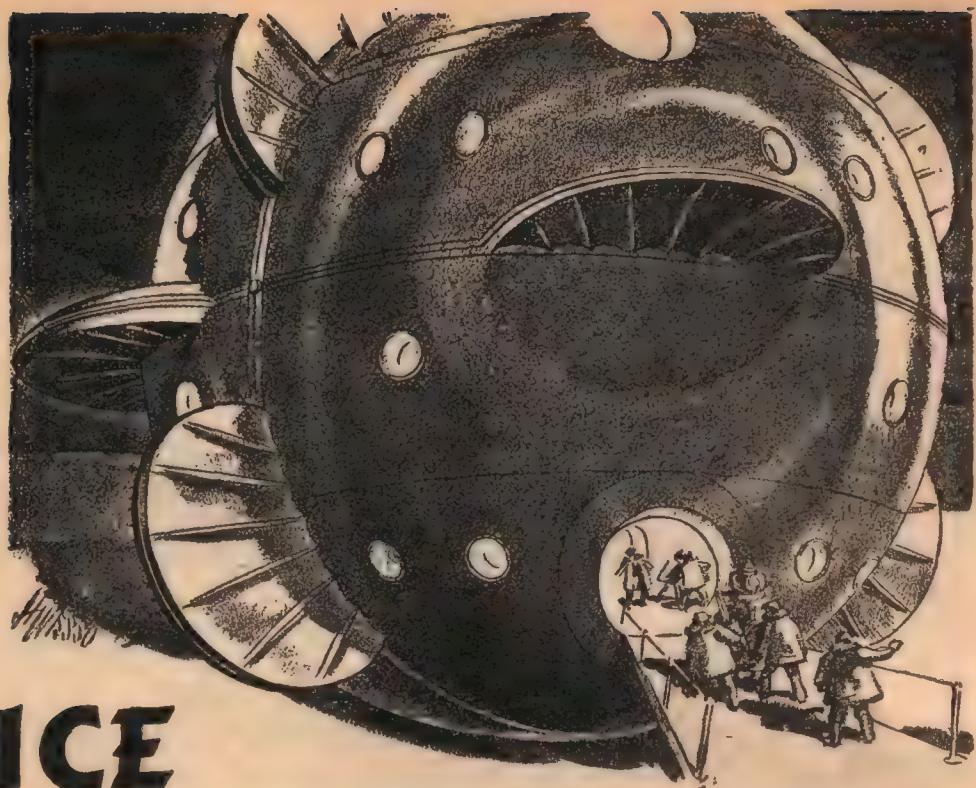


ITHE ALBINO RACE HAS WARS, TOO, IN STRUGGLES FOR THE CHOICEST CAVERNS. WITH SPEARS AND BOWS, THEY FIGHT PRIMITIVE BATTLES IN THEIR PHOSPHORESCENT CATACOMBS. SINCE THERE IS NO ROOM TO EXPAND IN THEIR ROCK-BOUND WORLD, WARS ARE NECESSARY TO KEEP THE POPULATION DOWN!



UNDERGROUND EXPLORERS, FINALLY DISCOVERING THEM, IN THE WORLD BELOW, BRING ALBINO PEOPLE TO SEE OUR WORLD. THEY ARE STARTLED. LACK OF A ROOF, TO THEM, IS IMPOSSIBLE. THE SUNLIGHT BLINDS THEM. THEY HAVE NEVER SEEN STARS, MOON, RAIN, SNOW, CLOUDS, OR FELT A WIND. THEY GO BACK BELOW, HURRIEDLY, TO CONTINUE THEIR MOLELIKE LIFE!





ICE OVER AMERICA

From Out of the Cold Abyss of Outer Space Hurts an Unknown Asteroid—Bringing With It a Freezing Death!

By **RAY CUMMINGS**

Author of "The Great Adventure," "The Man Who Saw Too Much," etc.

CHAPTER I

The World Is Doomed

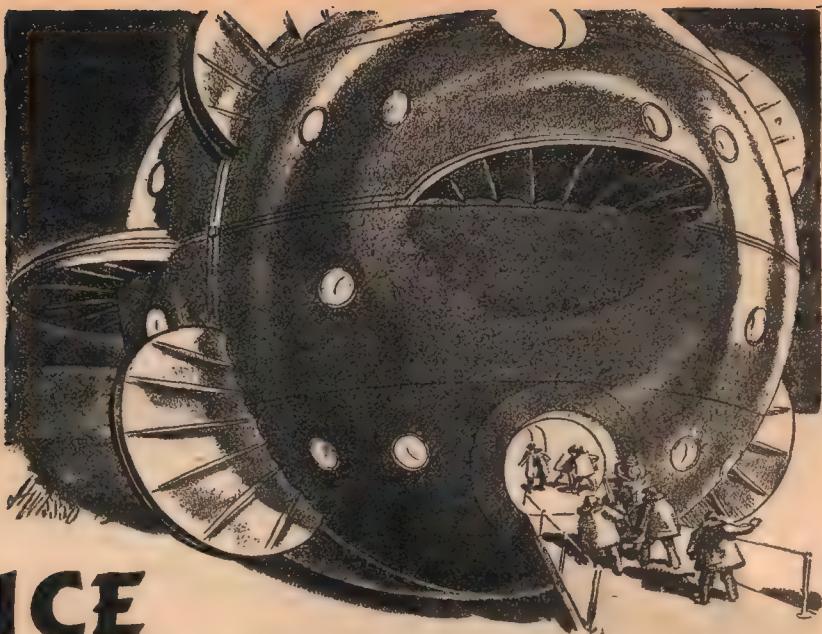
FOR me and my family, the first event of the Great Chaos came in October, 2009. Though connected with Public Events Division of the American Television Co., I was living with my grandfather, Dr. Elias Murdock, in Lake Placid. Grandfather was retired, but he still maintained an active astronomical observatory there.

My brother Martin Murdock, two years older than myself, was instructor of mathematics in the Georgia University for Girls. One morning, Martin televised us.

"Take a look at the palm trees," he said.

A sort of startled awe was in his voice. He swung the tele-lens so I could see out his windows. The palms that lined the College Gardens were drooping, blackened, shriveled by the freezing cold that had descended upon Savannah during the night.

That was the start. Within a week the world was ringing with amazement. A blizzard covered New York City in October. London was frozen. Snow buried Paris. February weather, in October, froze the whole Northern Hemisphere! We had thirty below zero on the mountaintop above Lake Placid, where Grandfather's observa-



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tory was stolidly perched.

From the Southern Hemisphere came contrary reports of amazing, unprecedented heat. Buenos Aires sweltered at the start of its summer. Rio was engulfed in furnace blasts. Melbourne, Cape Town—all suffered the same fierce heat.

Disturbed meteorological conditions caused violent storms everywhere. Old-fashioned ships were brought to disaster. More than half the time the great air-liners were grounded.

My post in the Public Events Division of A.T.C., kept me abnormally busy that weird October. I commuted from Lake Placid to New York City. The temperature averaged well below zero. Snow, with which the city cleaners could not cope, blanketed the canyon streets to a three-foot depth. Business was disorganized. Vehicular traffic was largely abandoned.

But there was, at first, no terror. A holiday aspect transformed the city, as though this were some far-north Canadian settlement celebrating an ice carnival. Crowds welcomed an enforced holiday from their working routine. They thronged the lighted streets, where darkness came in mid-afternoon. Old-fashioned horse-drawn sleighs made their appearance. Clothing stores waxed momentarily prosperous, with picturesque clothing hastily imported from Canada. Girls, in the vivid costumes of Northern carnival time, trudged the city ramps in snowshoes, where the snow was frozen like a Quebec mountain-side. A million laughing girls must have tried skiing for the first time.

EVERY agency of news dissemination rang with the possible causes. But nobody—at first—cared.

By November, though, terror began striking. Food supplies in the big cities had long since been disorganized. The people laughed, and submitted unthinkingly to the hardships. But then real hunger struck. Crimes leaped like fire that feeds on pure oxygen. Fuel supplies were giving out. Government censorship of public disasters at last broke down and was withdrawn. People began listening—then sat at their

instruments, shocked and frightened by what really was transpiring.

I saw little of Grandfather during those hectic weeks. I came home only to sleep. Grandfather and his ten assistants were feverishly busy. His huge refracting electro-telescope, one of the largest in the world, was suddenly taken over by the U. S. War Department. Itself an Emergency Department now, it was trying with all its resources to cope with the new conditions.

One night in November, Grandfather confronted me. A thin old man, with a great mane of snow-white hair, he was still vigorous and spry. But he wore an unusual haggard, frightened look.

"We've got to tell them, Dale," he said. "The Government agrees it's best."

"Tell them what?" Like the public, I was too immersed in details to have thought much of the cause.

"This catastrophe to the world!" His thin old fingers trembled as he rifled his sheet of mathematical data. "This exodus to the tropics. It must be stopped. How can we crowd Earth's teeming millions into the little belt of the Equator? Disease will break out. Death will come, not by thousands as now, but by millions."

The world exodus already had begun. For weeks every agency of transportation had been overloaded. Florida, southern Texas, California teemed with the rich. When the snow struck that far down as though a dam had burst, the people rushed to the crowded lowlands of Mexico. The heights there were snow-buried.

The exodus now was a rout—by ship, by aero, by snow-car. Every hidden road southward was thronged. Thousands trudged on foot through the few hours of daylight and the eighteen-hour Arctic night. The roads were littered with abandoned household goods that the terrorized people no longer could carry. And frozen bodies lay neglected in the snow. . . .

That was the true picture of America. Europe and Asia were worse. South of the Equator was a weird reversal—blazing days brought shade temperatures of 110° and 120°, through

which the people tried to stagger northward.

"I know the cause of all this, Dale," Grandfather was saying. "If the people understand it, we may hold them steady to fight this out. Running away won't solve anything."

Government agencies had been saying that for a month. But the London Government offices were now in Malta. The Washington staffs were spread from Miami to Tampa.

ISAT with Grandfather all that night in his little study under the observatory tower. The bleak blue-black night pressed ominously against our storm windows. Martin had come by Government aero from Savannah. A score or more ace newscasters and Government officials joined our conference to prepare tomorrow's momentous broadcast. We sat listening to Grandfather's solemn voice.

"I don't want to be technical, gentlemen. What I say, you will have to put into even more popular language that no one can misunderstand. This rout toward the tropics must stop. It is true that what we used to call the Torrid Zone is becoming the only temperate portion of Earth. But it will be overcrowded. Sanitation cannot be maintained. Disease may kill everyone."

"But what is the alternative, Dr. Murdock?" a newscaster asked.

"We can fight better in our accustomed environment. We in this room are all alive. This winter will be more frigid than any since the Ice Ages. But summer will come again. A blazing summer is better than dying on a frozen road."

He steadied himself.

"The thing is an astronomical catastrophe, gentlemen, that I hope may be only temporary. An asteroid is near Earth. A small metal world, bleak and barren, it is only five hundred miles in diameter. But it is so dense that it has almost the mass and gravity of Earth. I observed this asteroid twenty years ago. The Royal Astronomical Society named it Zanthos. Its narrow elliptic orbit carries it at high speed around the Sun and out almost to Neptune. Its first appearance was twenty

years ago. By what cosmic chance it came then, no one knows."

We had all had fragments of this information for weeks, of course. We knew that twenty years ago little Zanthos had come and gone. By chance it had not passed close to any of our planets of the Solar System.

But now it was visible to the naked eye. A new star, it blazed like Venus with reflected sunlight. Its mass had disturbed Earth.

The inclination of Earth's axis was shifting!

"In another month," Grandfather was saying, "our normal twenty-three and a half degree inclination will have increased. Our South Pole will be pointing almost directly at the Sun—"

He described the intricate astronomical change. My mind strove to picture the blazing Southern Hemisphere, with a summer that was months long, while the Northern Hemisphere was just a gelid, frigid night.

"But it's temporary," Grandfather said vehemently. "Our Earth continues in its orbit. Spring will come, then blazing summer here in the North, and frigid winter in the South."

DAYS and nights were all to be changed.

The whole accustomed order of everything would be flung into chaos. This was the greatest catastrophe in the history of the world!

"Tell them to stay where they are," Grandfather stated. "They must stay where they are and help us fight it through!"

The broadcast went over every air-channel in the world, that next day. Over and over, through the brief Northern daylight hours, through the endless day in the South latitudes, it was repeated. Who heard it? Of the terrorized billions, who stopped to ponder the intricate astronomical facts from doddering scientists?

Each man feels he is the center of the Universe.

Everybody knew that in the Equatorial belt lay relief, and few thought of more than that.

We were a world at bay, in the midst of the Great Chaos. But the crowning

terror still was to come.

I was in my office in New York City that day—the first of December—when the broadcast was flung. I was the only one of my immediate staff who entered that cold, bare office of empty desks, with a silence like shuddering death upon it. It was ten o'clock in the morning, but outside the windows, frosty stars gleamed in a purple Arctic sky.

The St. Lawrence River for weeks had been frozen solid. The Mississippi was solid, with an ice bridge that had broken in the South and drowned thousands. The Hudson, from Troy to New York, was solid. Even the Savannah River was impassable, choked with ice flows.

THAT black morning I stared at my own little segment of the myriad weird scenes of the giant Earth-arena. The New York street was a dark and almost empty canyon. Earth's greatest city was so abandoned that I felt as though I were alone in a frozen tomb. The street was choked with snow. Vandals had smashed windows. Merchandise was scattered on the street, frozen, half buried.

As I was sitting there, my news-audio-phone blared forth the sudden terror that stiffened me.

All that had gone before had not been enough. Now we must have something worse!

Even in our modern twenty-first century world, no successful space ship had yet been built. But now my televizor showed the frozen plains of Southern Georgia, a few miles outside the crowded city of Savannah. Some news-gatherer was flying over the neighborhood, giving out the image from his television transmitter.

On the naked Georgia plain, I saw a huge, weird looking metal ball. A space ship!

Men, who were painted by a purple light-glow, were pouring from it. Though they seemed human, they were dragging out fantastic mechanisms which they were hastily erecting.

Earth was beaten down, harassed by the menacing forces of an outraged Nature.

Now it faced a new attack!

CHAPTER II

Visitor from Zanthos

AS I stared, all my blood seeming to be freezing in my veins. A great circle of violet light, half a mile in diameter, spread like a curtain up into the sky! It glowed, blurring the invaders camped behind it.

Close to the televising aero came another news plane. It approached too close to the purple barrage. Abruptly a segment of the curtain billowed outward, caught the plane. There was a tiny speck of light, a tiny puff. The plane was gone, dissolved into nothingness!

Horrified, I watched the weird beings from some other world who had come to attack us. That was my conviction. Then one of my receivers picked up a broadcast.

"I am here," the ironic voice was saying. "José Tarrago. You remember me. Twenty years ago you sentenced me and my comrades to death. You, the whole world, are sentenced to death now! I shall say nothing more. My actions will speak. José Tarrago will get his revenge at last!"

The wave-channel died in dread silence. . . .

I was only an infant, twenty years before, when the case of José Tarrago and his band of criminals agitated the world. Grandfather explained it to me that day the invaders landed in Georgia. We were in his study at Lake Placid.

In the summer of 1990, twenty years ago, there had been a middle-aged man named Paolo Collette. A man of forty. Whatever his grievance was against his fellow men, no one knew. A scientific genius of independent wealth, he worked alone in a barred laboratory which later was found to be one of the best equipped on Earth.

Perhaps he was mentally unbalanced. Gradually his isolation was broken. He gathered around him a group of men—scientists, some of them; criminals, all of them. In 1990 it was discovered that Collette had perfected the burning death, an electronic projector capable of hurling a directional, non-radiating

heat beam a tremendous distance.

With such a weapon, the world could easily be devastated. And Collette and his band were perhaps planning just that.

"Collette's plot failed," Grandfather said. "He and all his band—some five hundred in number—were captured and sentenced to death. How did they escape? Well, that was suppressed by Government order. Most of us scientists believe someone smuggled in to Collette a machine that enabled him to melt his way through the jail walls.

"None of the five hundred was recaptured. In Collette's laboratory they were surrounded. And then, too late, it was discovered that Collette had built a space ship. It wavered up through an opening in the laboratory roof, vanished into the starlight. I saw it in this same reflector."

My grandfather gestured to the giant, double-barreled, stereoscopic telescope in the observatory over us.

"I watched it leave Earth's atmosphere and head into space. It actually seemed to be wavering. No one thought then that Collette had really built a practical interplanetary vehicle. It would come to grief, of course."

"But evidently didn't," I said.

"No," he agreed. "Evidently not. At the time it left—twenty years ago—Zanthos was crossing Earth's orbit, outward bound. I can understand it now. Those escaped criminals must have landed on Zanthos. And now they have returned."

"But who was José Tarrago?" I asked. "You've been talking about Collette."

"Tarrago? He was a Spanish-American adventurer, Collette's lieutenant. He had been wanted for several previous murders."

My grandfather's grim voice abruptly stopped. At our study window, a pallid face had suddenly appeared. It pressed against the outer pane, its luminous dark eyes staring in at us.

"Dale, what's that?" Dr. Murdock gasped.

We leaped to our feet. The face vanished. I rushed to the door, opened it. The frigid Arctic cold struck at me in

a blast. The silvery moonlight disclosed a figure crumpled on the snow under our window. I shoved my grandfather back.

"It's fifty below. You'll freeze!"

Within a few seconds I turned over a limp body, stared at its white face framed in a fur hood, the slim, boyish figure clad in a furry jacket and trousers.

As I dragged the body back to our doorway and tumbled it inside, I was aware of the queerness of the fur. It was long, shaggy, greenish hair, with queer little animal heads like epaulets at the shoulders.

"Is he dead?" Grandfather asked anxiously.

The boy's eyes were closed, but he was breathing. He moaned as I laid him out on the warmth of our floor. Then his eyes opened. Dark luminous eyes, with long lashes, widened at us.

I pulled off the parkalike, furry hood that framed his face. Long black tresses tumbled out.

It was a girl! She had fallen from exhaustion, but the warmth of our room and restoratives soon revived her.

We got her out of the furry garments. Small, slim and dark, she was clad in a strange garment. It was woven of shining blue metallic threads that were drawn to such hairlike fineness that it was soft, shimmering fabric. She wore a long-sleeved waist with a collar that clasped her slender throat and flared in queerly futuristic fashion. Metal strands crossed her bosom, descended and bound her slender waist. A brief, flaring skirt disclosed her satinlike legs.

It was a strange costume. But the girl herself, with great masses of black hair cascading to her waist, her beautiful face pale and strained, was human and normal in every way. We could see that she understood us, as we revived her.

"What's your name?" I said. "Who are you? Where did you come from?"

Just looking at her made my heart pound.

"Eve Collette," she murmured at last.

My grandfather and I sat by her, ministering to her, as we listened in amazement to her murmured words. The daughter of Paolo Collette, she was born on Zanthos seventeen years be-

fore. Her mother was an Earth girl who had married Collette. When he and his band were captured, jailed and sentenced to death, his young wife had smuggled the heat mechanism to him. She helped him and his men in their sensational escape and joined them in the space ship.

I need not detail what Eve told us of her life on Zanthos. She lived on that barren little world all its twenty-year journey out to Neptune and back. She told us of its savage, primitive natives, hardly a hundred thousand in number. Weirdly unlike Earth people, the inhabitants lived mostly underground to combat the frigid cold of outer space and the blasting heat as they rounded the Sun.

WITH his ingenious scientific apparatus, Collette greatly improved conditions on Zanthos. The natives were his willing slaves.

"My father was not a villain," Eva insisted earnestly. "When he was a young man, he lived under another name here in New York. He was sent to prison for fifteen years for a crime he did not commit. Then he was pardoned. He married my mother, but nobody could give him back those fifteen years. It made him bitter. He wanted revenge upon the world—"

"Where are your father and mother now?" I asked. "What can you tell us about this fellow, José Tarrago?"

She shuddered. Her eyes, glowing with the bluish tube-light of our room, somberly regarded me. There was the fire of hatred and fear in her dark gaze.

"José Tarrago murdered my mother and father last year. They had come to see things differently. They were sorry for their actions here on Earth. They were planning, when Zanthos got close, to come back to Earth. They wanted to offer their scientific apparatus to help Earth, not to harm it."

Then she told us how José Tarrago had been plotting his return to Earth on a murderous mission. When Collette punished him for trying to make love to Eve, he murdered her father and mother, talked the men into joining his plot against Earth.

"But what is he after?" I demanded. "Does he want to devastate the Earth,

murder its people, destroy property, just for revenge?"

Eve's luminous eyes stared at me. Her fingers were twisting nervously. Then I noticed that she was toying with a big ring, a queer looking circlet of bluish metal on one of her slender fingers. Its prongs clasped a big flat jewel, like a man's old-fashioned seal ring. But this stone or jewel was apparently translucent. It looked like a lens. . . .

"What does Tarrago want on Earth?" Eve broke her silence. "I do not know. Revenge, yes. I wanted to warn you of that. He will kill with Father's electronic heat beam, kill ruthlessly—"

"But there is something else he is after."

"Yes. I think so. I do not know what it is." She held out her hand. "That night we found Father and Mother, Father was just dying. He gave me this ring. He told me things that were very strange."

I exchanged a glance with Grandfather. Here was some mystery that vitally concerned the welfare of the world.

"What did he tell you, child?" Grandfather urged.

"He told me then that I—I have an older sister here on Earth. Her name is Wanda. My poor mother had to leave her infant girl with a friend on Earth. With whom, I don't know. If Wanda is still living, she would be about twenty-one years old now."

"But what has that to do with Tarrago?" I asked. "Or your ring?"

"I do not know, but there must be some connection. Before he died he told me he had left a sealed message with Wanda. It was to be opened only after Father had died—or if the world was facing disaster."

"And your ring?" I persisted.

"He told me to keep it always. He had left one just like it with Wanda, to be used in some way with his sealed message. He—he was almost gone then—" Her voice broke off, but she steadied herself. "He was trying to tell me, but it all got incoherent. Something about the message disclosing his scientific secret. He begged me never to let Tarrago know any of this. If ever I got back to Earth, I was to find

Wanda and give his secret to the Earth. Then he died."

Grandfather and I blinked several times.

"How did you get here?" I asked softly.

TARRAGO had brought her on his expedition, she told us. She was terrified by his desire to impress her with his greatness. This morning the ship of the invaders had passed high over frozen New York State and had dropped on the Georgia plain. Eve had escaped in a small lifeboat to avoid Tarrago and to warn Earth. In her descent she had seen our observatory. Her little vehicle was smashed in landing. All day she had wandered in the snow, trying to get to us.

"The authorities must be told all this," Dr. Murdock said. "I'll contact them now. The British and American Emergency Departments will help us. This mystery must be solved. Tarrago and his band must be annihilated—"

Grandfather started for his transmitter. The harrassed world governments, in these few hours that had passed, certainly did not realize the power, the deadly menace of Tarrago. No concerted action was as yet under way against that Georgia encampment.

But suddenly one of our audiphones shrilled with an emergency call. I plugged it in. It was our secret oscillating, code-wave instrument. Only audible connection could be made. We heard the voice of my brother Martin, from the girls' college just outside Savannah.

"Dale! Dale—" Horror was in his tense, strained voice.

"Yes," I gasped. "I'm Dale. What is it, Martin?"

"Attacked! If I—am killed—you must know. North Latitude thirty-six degrees, forty-two minutes, eleven seconds. West Longitude seventy-six degrees, nine minutes, forty-nine seconds, then a hundred and ten feet—"

"Martin, what does that mean?" I cried as Grandfather copied down the figures.

"I don't know, Dale. You must go there quickly. A great thing of science to benefit the world. If I—they're coming!"

I was so helpless, so many miles away! I heard a girl's scream, a gasp from Martin. Then silence . . .

"Martin!" I shouted. "Martin!"

But the code air-channel was dead.

In the silence of the little observatory room, white-faced Eve and my grandfather were staring blankly at me. Then another audiphone began buzzing. I jumped to it and plugged in the connection.

"Dale Murdock?" a voice exclaimed. "The attack is beginning—"

It was a Government official who had been at our conference the previous evening. He was in an observatory aero, hovering near Savannah. Our mirror-grid lighted with the image of what his finder was seeing. It was a ghastly vision. To this day I shudder with the memory of it.

THE frozen red clay of the empty Georgia plain glistened with frosty moonlight. The purple barrage of Tarrago's encampment was a great circular curtain, from the ground high into the sky. The curtain was shrinking now, and in a few minutes it vanished. Tarrago's shining, ball-like vehicle was revealed. It was rising, floating upward. An aura of purple hovered around it. In a single minute it was half a mile high, leveling off, heading northward at incredible speed. Then presently it came back, circling over the city of Savannah.

From it a spreading violet beam stabbed down, illuminated a circle of several hundred feet upon the ground.

Eve, Grandfather and I sat holding our breath, watching the shifting image on our mirror-grid. Across the city of Savannah, with its teeming millions of refugees, the purple beam cut a wide swath. Metal and stone houses melted under the giant blast. The three hundred foot pathway was a black trail of death, in which nothing was left but blackened ground with a fused litter that glowed red.

The beam snapped off as Tarrago's ship swept over the river and toward the sea. Then in a moment he was back. The beam again darted downward.

Our telescopic enlargement gave a brief glimpse of one of the city streets.

It was a turmoil of milling, terrified people, a silent image, but my horrified mind echoed with their shouts of terror, the thudding tramp of their feet. In the shelter of a portico I saw a young mother crouching. Her children were gathered at her knees, her arms protectingly around them. Her face was livid with the terror of a female animal ready to fight for her young

The circle of the beam came almost slowly down that crowded street. The houses melted into a bubbling viscous mass, first white-hot, then orange, finally red. The struggling blobs that were human beings dissolved in the glare—just flaming gas in the horrible conflagration.

Tarrago's murderous ship weaved back and forth over the doomed city. Then he dropped back to his former encampment and again flung up his protective barrage.

And the city of Savannah, save for a few smoking, tottering buildings, had vanished. There was only a giant spread of glowing embers, a vast firepit of death. Lurid, green-yellow smoke rolled up in a cloud, dissipating itself into the frosty moonlight.

LONG after that horrible night I gained possession of Martin's diary transcript, which he had recorded on tape with the intention of sending it to me. It would have cleared up much that remained a mystery for so fearfully long. But its position in this account belongs at this point.

This girls' school down here in Georgia is like everything else on Earth. It has been disorganized, but the effect of the Great Choas has been to increase rather than decrease the number of people in it. Despite the turmoil of the world, most of the original hundred girls are still here. Some of their parents have come here, since Georgia is preferable to the northern states. The rest of the girls can't locate their families.

When the invading space ship landed near here, the school was thrown into a panic. But nobody abandoned it, because there was nowhere to go. We got the terrified girls to help us barricade the place.

Tonight I was sitting alone in my study when one of my mathematics students burst into my room. I recognized the tall, serious, brown-haired girl. Wanda Gregg is twenty-one, the oldest girl in the school. She is taking a post-graduate course in astronomical mathematics. I've always been interested in her, mainly because of her difference from the other girls. She lives here all the year, since she was the ward of the school's headmistress, who died last year.

I looked up, noticed at once her great distress. Everyone else, of course, is panic-stricken, but this was different.

"What is it, Wanda?" I asked. "You should be upstairs."

"Mr. Murdock," she cried. "I must tell you something."

In frantic haste she closed the door.

"All evening I've been trying to decide. I've got to tell you now. Your grandfather Dr. Murdock is a Government scientist. There is something you must tell him. I was given a secret that I can reveal only when my father dies or disaster comes to the world. Well, I think my father is dead. And something horrible is certainly happening to the Earth"

I sat listening to her strange disclosures. We've always known her as Wanda Gregg, but her real name is Wanda Collette. Her father, the notorious scientist, had left her at the school when she was an infant, and gave the headmistress enough money to care for her all her life.

"This little cylinder was left with me," she blurted. "And a ring. A queer looking ring with a white translucent stone. I don't know what the ring is for. The instructions for using it are in the cylinder."

She showed me the cylinder, which was about the size of a finger. I soon found that it was sealed. But I saw the inscription of almost microscopic writing on the bit of paper clipped to it.

"It contains a message from my father. His secret to help the world if anything terrible happens to it. A scientific treasure—"

"And the ring?" I asked.

"I—I lost it five years ago. When we open that cylinder, we'll know what

the ring was for. Oh, I was so horrified when I lost it. I didn't know what to do. . . ."

I STARED at the tiny cylinder before I could manage to unclip the folded paper. What sort of mystery was this? Naturally, I had heard of Collette, and I knew he was not a practical joker. That was why I hesitated. The inscription was so small that I had to find a magnifying glass to read it. When I held the glass close, I read:

North Latitude, thirty-six degrees, forty-two minutes, eleven seconds, West Longitude, seventy-six degrees, nine minutes, forty-nine seconds, then a hundred and ten feet. My secret treasure can be located at that latitude and longitude. That treasure is described inside this cylinder. It can be located by Wanda's ring.

"Located by your ring?" I cried. "What did he mean? But the ring is lost—"

"I know," she moaned. "I know." "I'll give this information to my grandfather," I said.

I handed back the cylinder to her after shoving the paper into my pocket.

"We must open it now," she said hastily. "There is no time to lose. This means the safety of the world. . . ."

She must have been intuitive at that moment, for the school's siren began wailing madly. Everybody in the building seemed to be rushing around without direction.

I don't like action or danger in any form, but I believe I have the salvation of the world's billions of people. Menace is striking here. I might not have time to tell you everything, Dale, so I'm talking at the recorder, and I'll go on talking while calling you on the audiophone's secret wave-channel.

"Dale! Dale—attacked. If I am killed, you must know—North Latitude, thirty-six degrees, forty-two minutes, eleven seconds. West Longitude, seventy-six degrees, nine minutes, forty-nine seconds, then a hundred and ten feet—"

"Martin, what does that mean?"

"I don't know, Dale. You must go there quickly. A great thing of science—to benefit the world. If I—They're coming!"

Wanda was grabbing my arm, turning me around. The violet light that streaked through the window and destroyed the audiphone came from a murderous devil wearing furs. The whole school is ringing with running footsteps and the sounds of a weird attack.

I can't go on talking, Dale. The beam of purple light is melting the metal casement. There goes the glassite pane, crashing into the room. Two fur-clad men are climbing in.

"Wanda, get behind me!"

"There she is—that's Wanda, all right. Wallop the prof on the head, Lugo. I'll take the girl. We got to get out of here—"

"Get back, damn you. Get back or I'll heave this big book at you!"

"Ow! You dirty rat. Here's a clout on the skull for you—"

CHAPTER IV

Extract from Martin's Diary

DIZZILY, I opened my eyes on a weird scene of glaring purple light. I was inside Tarrago's encampment, fifteen miles from devastated Savannah. Nearby stood the huge, gleaming, silvery interplanetary ship, ball-like, with circular aluminite fins. A quarter of a mile away, the violet curtain of light reached far into the sky, a strange blockade wall that enclosed the entire camp.

In that glaring light I saw the figures of men moving about. The place was littered with apparatus, which was being loaded into the space ship. There were two kinds of men. Some wore peculiar furs that did nothing to transform their savage features. Those were the members of Tarrago's villainous crew. Then there were squat, powerful dwarfs, toiling like a group of misshapen gnomes. For garments they wore only a short fur covering that exposed their gray, hairy skin, under which their muscles rolled in great, ugly knots.

I was lying on the ground. Suddenly I sat up, my attention caught by a group near me.

Tarrago sat on a keg. He was a giant of a man, clad in skins from which dangled ornaments of beaten metal to denote his leadership. Despite his coal-black hair, which hung over his ears, and the neatly trimmed mustache that did not soften his hawklike face, he was undeniably handsome. His appearance, his bearing — everything about him bespoke his forceful authority.

He was grinning with sardonic triumph at the terrified Wanda, who stood before him.

"So you're Eve's sister," he taunted. "Well, well."

"Eve?" Wanda asked uncertainly. "I'm Eve's sister?"

"Don't try to fool me. You know you have a sister named Eve. She escaped from me this morning. Did she communicate with you?"

"No," Wanda replied in bewilderment.

He stared at her with his piercing black gaze.

"You may be lying," he said. "We shall see. I must get her back."

He rose from the keg, swaggered toward the girl as she retreated before him.

"Do not be afraid of me," he said. "You are not as beautiful as Eve." Suddenly his grin faded. A grim tenseness stiffened him. "Your father left a secret with you—a little metal cylinder. You were to wear it upon you always. Give it to me."

Wanda had it now, clipped to a chain beneath her high-necked brown dress.

"I lost it," she said. She drew herself up. Despite her inward terror, her brown-eyed gaze held level.

"You lie." His black-bearded face twisted in fury. "No one dares lie to me, Wanda." Suddenly his huge hand darted out, seized her by the wrist. "Your father gave you a ring, always to be worn. Where is it?"

"I lost it," she repeated steadily.

I staggered dizzily to my feet. My head was roaring.

"You let her alone," I said.

Tarrago swung around and grinned broadly.

"Oh, I thought you were dead. Why those fools brought you along, I don't know."

"I thought maybe he knew the secret, too," Lugo put in.

Tarrago shrugged. Again he gripped Wanda. With a muttered oath I lurched forward. But Lugo and another man caught me.

"Give me the cylinder," Tarrago said. His hand reached for the neck of her dress.

"No—" she gasped.

I was struggling with my captors, but I kept my wits.

"Give it to him, Wanda," I said.

"The lens-eyed teacher has sense," Tarrago laughed. "Obey him, Wanda."

SILENTLY she drew out the little chain, unclipped the cylinder. With a muttered oath of triumph, Tarrago seized it. Within a moment he had broken it open. A tiny scroll was inside. He smoothed out the oblong of parchment some four inches by eight.

"Give me more light, Lugo."

The paper was covered with microscopic writing, photographed down to this miniature. Tarrago was given a magnifying glass, and was staring at the tiny scroll. But still he could not read it. The writing was blurred, out of focus, undecipherable.

"Queer." He sat baffled. Then his wrath rose. He strode over to me. "You know the secret of this!" he blazed.

"I do not," I insisted.

Tarrago shouted at one of his fellows.

"Get me the electronic wire. What these two know, I'll whip out of them."

"We don't know anything," I said. "You can't get from us what we don't know."

"Search him, Lugo." The puzzled Tarrago swung upon Wanda. "By God, you'll tell me now." He cuffed her face.

"Stop it, you damned coward!" I shouted.

Lugo was searching me. Suddenly I recalled that the little paper inscription was in my pocket. I struggled to get it out, got it to my hand, trying to jam it into my mouth and swallow it. But Lugo seized it. Two other men rushed in. With wildly flailing fists I went down under their weight.

Tarrago read the tiny sliver of paper.

"North Latitude thirty-six degrees, forty-two minutes, eleven seconds. West Longitude seventy-six degrees, nine minutes, forty-nine seconds. Then a hundred and ten feet."

Evidently it meant much to him.

"Got it, Lugo!" he shouted. "The location! By God, we have it at last." Then his commanding voice rang out. "Load up. We start in an hour."

Wanda and I were thrust into the silvery vehicle. Presently it was loaded, with the hundred men of Tarrago's band crowding it. The barrage curtain had faded. The gleaming ball rose into the air, with its little aura of protective barrage surrounding it. At five thousand feet it leveled off, floating at high speed northward through the frosty moonlight.

* * *

WHAT had happened to Martin down there in the college, Grandfather and I could not find out. We had sent emergency calls to the nearest authorities, but in the chaos in Georgia no information could be obtained.

The mysterious data, which Martin had given us, Grandfather wanted to turn over at once to the War Department. But I could see no use of that. The location given was in North Carolina, on the dunes near the coast. Curiously enough it was in the desolate Kitty Hawk region where the Wright Brothers made their first efforts at flying.

I looked it up on our coastal chart. It was the location of Collette's laboratory, from which, in his hidden space ship, he had escaped from Earth. The entire region had been deserted since the Great Chaos.

What was the meaning of this mysterious message from Martin? I determined to find out—alone, without Government forces rushing in like bulls in a china shop.

Fur-clad, I left the observatory. As I crossed the moonlit snow toward the heated stage where my little flat-cabin aero was racked, I heard a sudden commotion behind me. Eve, with her fur suit on her, was in the doorway, struggling like a little wildcat with Grand-

father. Then she broke away from him, came dashing at me.

"Dale, I'm going with you."

"Oh, no, you're not. Go back, Eve."

"But I am." She seized me. "That message from your brother—How could he have learned it except from my sister, Wanda?"

That was true enough, I had to admit.

"I can help you," she urged. "I may know something about what we find. And this is my affair even more than yours."

Certainly I did not anticipate any emergency of danger in this trip. And with the world in chaos, danger was common enough to be a habit with everyone.

"All right," I said. "Come on."

As we got near the stage, a few hundred feet away, something black was lying in the snow. We stared, then ran to it. The thing was a tiny smashed vehicle. A tangled litter of metal wreckage had crashed here.

Eve recognized it as a lifeboat like the one in which she had escaped this morning. There was no sign of a body, no trail. The sharp wind was blowing the surface snow over any possible tracks. We had no time for any lengthy search.

Presently we were in my aero, rising into the moonlight.

It was a good two-hour trip, but the north wind was behind me and I could make speed. In the small vaulted cabin, dimly lit, I sat with Eve.

Under us, as we swept down from the nearly deserted Adirondack region, the vast panorama of the Great Chaos was unrolling. Deserted, snow-bound cities, tomblike, had been wrecked by the unnatural storms which had lashed them. Frozen rivers, broken bridges—desolation lay everywhere

Farther south we saw the trudging refugees, little blobs on the frozen roads. We never descended close enough to see the sick, the maimed, dropping exhausted into the snowdrifts, to be numbed to death by the cold.

THE audiphone in my cabin was droning its news. Savannah was in smoking ruins. Martin's college seemed to have been spared. Tarrago's

raiding ship had dropped back to its former encampment. The United States War Department was sending its armed forces for an attack. Britain, from its base at Malta, had dispatched a fleet of warplanes, heading toward us over the tumultuous Atlantic.

In all the chaos, I knew that there would be more talk than action.

Suddenly our audiphone blared with a new disclosure. The Tarrago barge had suddenly vanished. The silvery ball had risen, swept into a bank of clouds above the ocean, and vanished. The newscaster optimistically assured his listeners that the invaders were doubtless heading back into space. The menace from them was over . . .

Our mirror-grids were giving us wide-flung glimpses of the harried world. Melbourne was in flames—spontaneous combustion, perhaps, in the furnace blast of heat. A typhoon raged over Tokyo. Buenos Aires—most beautiful city of the western world—lay abandoned, a shimmering city of the dead, smothered in the heat. Tierra del Fuego at last justified its name. It glared yellow-red, with myriad craters that abruptly had burst alive.

"Death everywhere," Eve moaned. "My mother hoped some day to find peace on Earth."

We sat silent, staring. Then behind us I heard a sudden sound. From the blue-lit shadows behind my motor, a fur-clad man rose up. A stowaway! A knife came whizzing past my head. I ducked and shoved Eve behind me to the floor. The controls of the car locked as I dropped them. I sprang and met the fellow in the center of the little cabin.

He was leveling a weapon. My fist struck it aside. But it discharged with a sizzling blue flash that sent a shower of sparks from the cabin ceiling.

Then we came to grips. He was a huge, bearlike fellow in his furs. I caught a glimpse of his heavy face.

"I've got you!" he yelled.

His arms pinned my hands to my sides. I could not draw a weapon. We swayed against the chart table, crashed it over. Then we went down. Tarrago's man could not hold me. I broke away, leaped erect. As he rose, I nailed him with a jab under his chin. It lifted him

backward and crashed his head against the motor as he fell.

That was the end of him. I shoved Eve behind me so she did not see his broken skull while he lay twitching. Then I threw a motor cover over him.

IT was after midnight when we circled above the huge metal building that had been Collette's laboratory. A high metal wall, which once had been electrically wired, surrounded the spacious grounds. For twenty years the place had lain neglected until it had become a shambles. Now the blasts of abnormal winter had wilted the vegetation. The whole place was silent, snow-covered.

We landed on the snow a dozen yards from the main laboratory building. My mind flung back to Martin's agonized message. My conviction was that he had given his life to deliver that vital message. The authorities, twenty years ago, had searched this building and found nothing. What was the meaning of that specification—a hundred and ten feet? The answer to that was a secret, I felt sure.

Eve and I advanced to the main front door. It was locked. I found a broken window through which we climbed into the dark, frigid interior of a frozen metal corridor. We saw nothing, heard nothing. We started along the corridor.

Abruptly a light beam sprang up, clung to Eve. From behind the lights, furred figures came leaping!

CHAPTER V

The Final Blast

THE attack caught me unprepared. The roof of the laboratory building was meant to open like the dome of an observatory. Once Collette had effectively used it. Now Tarrago had lowered his ship into the huge room where it had been built, and closed the roof again.

The coming of my aero had been observed by Tarrago's outer guards. He darkened and silenced the place, with his men waiting to trap us.

When the attack came, in the corri-

dor, I tried to get to Eve, who had been to one side of me. The attack had come so wholly without warning that I could not draw a weapon. The bulk of a plunging fur-clad man struck me. We went down. As we scrambled, I was aware that I had been thrown with my antagonist through a doorway.

I had a glimpse back to the eerie corridor, with its swaying torch beams. Milling figures were overwhelming Eve. Then one of them surged against the broken wooden door. It slammed. The corridor lights went out. The rushing men were carrying her away. Seemingly no one out there had seen me in the darkness, or realized that one of their men had attacked me. This unseen antagonist and I fought on the floor. Then I got away from him, jumped erect. In the eerie silence of that black room I could hear him panting. Moving backward, I stumbled over something. The sound brought him with a triumphant oath upon me. Because of a sudden plan, I was trying to be silent. Instead of firing my drawn weapon, I tried to crash it on his head. But I missed. I only struck his arm.

Fate, if you will, did not want me to die. A knife in his hand grazed my face. I caught his wrist, twisted and got the knife. My jab with it was only a guess. But it went into his throat. With a weird gurgle of blood, he tottered and fell.

For a moment I stood panting over him, alert for a movement that did not come. There had been no alarm. There was only silence and blank blackness. Within a minute I had taken off my furs and clad myself in his, letting the big hood shroud my face. I did not dare to light a torch.

Cautiously, in almost solid blackness, I groped along the corridor until the moonlight that straggled through broken windows helped me. I heard voices from up a staircase, where a light-glow was visible.

At the staircase head, I peered into a room. Collette's huge laboratory was spread before me. Tarrago's vehicle stood here. In the shifting glare of hastily erected tube-lights his men were standing, apparently inactive. And in the center of them, Tarrago confronted Eve, Martin and a tall, brown-

haired, beautiful girl.

"Well," Tarrago was saying, "this is luck for me, getting you back, Eve. This secret treasure of your father's—where is it? What did he mean by a hundred and ten feet? From where? In which direction?"

Eve was very pale. The other girl stood terrified, with her arm around Eve's waist. Two men were holding Martin back.

"I don't know what you mean," Eve said. "I told you I know nothing. I've told you that all the way from Zanthos."

"I know you did." Baffled, Tarrago leaped savagely at her. "By God, you and your sister, you're both alike. You don't know anything. Do you think you can trick me?" His huge hands suddenly gripped her slender throat. "I told you I loved you," he rasped. "Well, that is true. But I am a man—no woman can stop me. Where is that ring your father gave you?"

"I—I gave it away," she gasped.

THAT was true enough. She had handed it to me in the Lake Placid Observatory. I had it in my pocket now.

"You lie," Tarrago raged. He twisted her slender arm so furiously that she winced. "You want more?" he demanded. "I'll break your arm—"

Martin was struggling, shouting.

"Stop it, you damn coward!"

All my plans for masquerading fled from me. I leaped forward. As I came into the light, I cast off my hood.

"Here's the ring," I said. "You let her alone. Do you bully only women?"

A dozen men rushed at me, seized me, slammed me against the wall. They searched me and took my weapons.

Presently the commotion quieted. Tarrago was concerned only with his quest. Scrutinizing Eve's ring and the blurred microscopic writing from the cylinder, he sat pondering.

Abruptly, I understood. The microscopic writing had been photographed down from a larger original, and simultaneously thrown out of focus! The ring was a magnifying lens—a matched focus that would sharpen the blurred script.

Though a queer method for code, it was not original with Collette. I

learned later that it was an Austrian device, perfected in 1987.

Would Tarrago fathom it? He did, a moment after I reasoned it out. With a cry of triumph, he inserted the rolled slip of paper in the circlet of the ring and gazed through the lens. He read the message, slowly, word by word, while he moved the rolled paper under the tiny eye-piece. A triumphant grin contorted his swarthy face.

"Listen to this, all of you," he shouted. "We have no secrets here among us. Did I not tell you all that what Tarrago goes after, he gets? The location of the *isotrope* is given here! We'll have it loaded in our ship within an hour." He chuckled. "We go back to Zanthos. The Earth will be glad to have us go." He thumped his brawny chest. "Outraged nature—and outraged Tarrago. Savannah is the monument to my power. Nature and I have just about wrecked the Earth. I want no more revenge."

The cylinder explained the principles upon which Collette's space ship was built, and gave an explanation of the heat-light beam. Those were Collette's gifts to Earth. His beam, the message said, could be projected a hundred miles or more, in a mild, diffused form. A gentle warmth could heat Earth's polar regions and make them habitable. Perhaps, with his undoubted scientific genius, Collette had calculated the present Earth disturbance caused by Zanthos. He might have wanted his heat beam to mitigate the chaos.

But none of this information was what Tarrago was after. He knew all that. Both of Collette's inventions were based upon a new element which he had named *isotrope*. It was here, a hundred and ten feet under a certain spot in one of the laboratory corridors. Centuries ago, a giant meteorite had fallen here, buried itself deep in the ground. Collette had found it, built his laboratory over it, with a secret tunnel leading down to it.

WE soon found the tunnel. The triumphant Tarrago, with several of his picked men, entered it. His vanity at his own astuteness made him take Eve, Wanda, Martin, and me, that we might watch and envy him as he

seized his valuable treasure.

"I am Emperor of Zanthos," he gloated. "With the diffused heat-light I have made my little world habitable, even when we are out beyond Neptune."

And the *isotrope* was his fuel. His supply of it on Zanthos was almost exhausted. Without it, Zanthos was not habitable for Earth people. It was a weird substance, this *isotrope*. Tarrago chuckled ironically as he explained it to me. With Collette's apparatus, the titanic power of its atoms was harmlessly harnessed. But under different conditions, it could wreck a planet as well as do it benefit. Of unstable atomic cohesion, under any electronic bombardment its atoms disintegrate in an instant expansion.

A star composed of *isotrope* had sometime gone up in cosmic explosion, throwing off this impure meteorite. Collette had refined it, returned it to its original atomic instability.

In Collette's underground workshop, I stood beside Tarrago, gazing at the glistening brown slabs which had been cut from the buried meteorite and refined by Collette. They were foot-long bricks of enormous atomic weight. A single explosion of one of those little slabs could rock the world!

We stood silently while Tarrago's men carried most of them up to the ship. Suddenly I heard Martin address Tarrago.

"What are you going to do with us? Will you turn us loose or take us to Zanthos?"

"You?" Tarrago's black gaze swung to the four of us. "Eve goes with me, of course. But the rest of you?" He laughed with grim irony, gestured to his portable tube-light which stood on a table. "If that, by chance, smashed against a block of *isotrope*—I think I will tie you here. You can watch a fuse that I will rig. And after we are gone, how the Earth will rock! What a giant hole will be blown here as you are hurled to perdition!"

I stood by the table, stiffened. Was that to be our end? Was the world to lose these momentous inventions of Collette's? Was I to let Tarrago take Eve to Zanthos?

I do not recall planning anything.

But suddenly I had seized that tube-light, poised it. Tarrago and his three remaining men were across the room. I leaped to one of the brown *isotrope* slabs, with the tube-lamp poised close over it.

"Put that down!" Tarrago gasped. "You fool, you'll destroy us all!"

"What's the difference?" I grinned. "We'll go either way. I like your company."

Both the girls screamed. Martin cried out with horror. Tarrago and his men shouted terrified oaths. Had I suddenly gone mad? No one moved. For that second there was only a stricken tableau of helpless people. . . .

"Don't—" Tarrago whispered. "Careful, you fool."

"Why not?"

THE tube-lamp in my hand was only a foot above the brown slab. I had only to drop the fragile lamp. Its short-circuited, released electrons would bombard the *isotrope*.

"Take your hand from your weapons," I ordered Tarrago. "If you kill me I still can drop this lamp. Martin, seize him. Disarm them all."

"You — you're insane," Tarrago groaned. He took a sideward step away from the advancing Martin.

"Just one more move like that," I said.

I meant it. In that moment of frenzied desperation, I was capable of the act. Tarrago could see it was no bluff. As I stood like a statue, tensed, holding the lives of us all in my poised hand, he and his three men let Martin disarm them and back them to the wall. "Good," I said.

My plan was crystallizing now. There was an adjacent cavelike store-room, with a door that could be barred on this side. I would force Tarrago to summon his men from upstairs. One by one I would have Martin imprison them—

But I had no need to go further with my desperate strategy. From overhead the sounds of a sudden turmoil

floated down . . . shots . . . thudding footsteps . . . shouts of command . . . We heard the sound of fighting, the men screaming as they died.

It was an attack by the emergency forces of the Norfolk Army base. My grandfather, Dr. Murdock, had notified them when I had left. Like bulls in a china shop, as I had known they would behave, they were charging the laboratory building. For a moment we listened. The turmoil was quickly over. Tarrago's little band went down to defeat, all of them killed or captured.

Then suddenly the soldiers' voices sounded in the tunnel near at hand. Tarrago, with the despairing knowledge of his defeat, jumped past Martin and hurled himself at me.

I flung the lamp then—not at the *isotrope* but at Tarrago's head. It caught him full. He went down. I was holding him, while Martin held the three other men under his leveled weapons, when the soldiers burst in upon us. . . .

I HAVE no more to add to this brief narrative. You who read it have had the true tale of what has been called my heroism. I need not detail here how Zanthos rounded the Sun and was gone—we hope forever. Or how, through Collette's genius, the era of space-flying has begun in practical form. Nor need I picture what we all know. The diffused *isotropic* heat-light beams are bringing a grateful warmth to Earth's frozen northern wastes.

Astronomers tell us now that Earth's axis, like a pendulum, will sway back and forth. But the swings will lessen until, in a year or two more, it will stabilize at its former position.

The Great Chaos is nearly over. And I am reminded, as I write this, of what a philosopher once said:

"Out of every evil, an equal good must come, to maintain a balance in the Universe."

I know that is true. The Great Chaos gave me Eve, and gave Martin his Wanda.

Next Month: TYRANT OF MARS, a Gripping Novelet of a
World in Bondage, by FREDERIC ARNOLD KUMMER, JR.
Plus Many Other Stories

SCIENTIFACTS

INCREDIBLE BUT TRUE

A SPECIAL FEATURE OF INTERESTING ODDITIES By MORT WEISINGER

INDEX TO AGE

YOUR eyes reveal your age!

The loss of tissue elasticity, one of the signs of physiological aging of the body, is not often closely related to the real age of the body as measured in years.

According to the Journal of the



American Medical Association, a leading scientist has developed an exact index on the relation of old age to that type of far-sightedness known as presbyopia.

From a detailed study of many cases it was found that where presbyopia is less than average, the expectancy of life is greater than where it is above the average.

THE COLOR OF THE EARTH

THE color of the Earth is blue!

To astronauts of the future, sailing against an interplanetary breeze of 40,000 miles an hour, the Earth seen from the windows of some cosmic ship will seem from the distance to be a blue shining star!

Other planets are colored, and the Earth is no exception. Venus appears white, Mars red, and Pluto has a reddish color. At present the color of the Earth can only be determined indirectly. At the time of the new moon there is besides its slim sickle that remaining part of the old moon which we see in shadowy silhouette.

In this phase the moon is observed at "full Earth," illuminated by the

Earth's reflected sunlight. To the unaided eye this light appears ash-grey. By spectroscopic analysis of the "Earthlight," however, it is demonstrated that blue rays predominate.

SOLAR HEAT

THE temperature at the center of the Sun is 40,000,000 degrees!

The temperature of the Sun, as compared to heat produced by man-made science, may best be illustrated by referring to the temperature of an acetylene torch, about 6,000 degrees.

If just enough flame were taken from the Sun's center to replace the flame of an acetylene torch, according to Dr. Clyde Fisher, of the Hayden Planetarium, the radius of the solar orb's terrific heat would melt every building, ignite every forest, burn all fields, and destroy all life in North America!

INSECT POWER

SOME insects beat their wings as high as 350 strokes per second!

Studies of the beats of insect wings via high-speed photography have brought to light extraordinary physical powers that have no counterpart among mammalian animals.

As high as 350 strokes per second have been counted in some cases. The small fruit fly has a wing speed of about 10,000 beats a minute, ranging to 13,000 under special conditions.

The fly can give in the neighborhood of 200,000 to 300,000 beats before stopping from exhaustion. The honey bee has a wing beat rate of about 160 to 220 a second, the bumble bee about 240 a second. A sea-gull's wings vibrate at about 15 beats per second, and a hummingbird's wings at about 50 per second. The studies were made with exposures as fast as 25,000th of a second.

THE HUMAN BODY

YOUR body temperature is never exactly normal!

The body temperature to most people means 98.6 Fahrenheit. Yet actually the temperature of the body is seldom exactly at this level but varies in a daily rhythm, with a minimum somewhere between midnight and 6 a. m. and a maximum between about 4 to 6 p.m.

Incidentally, the elephant, the largest



land mammal, and whose heat production is greatest in proportion to its surface, has the lowest body temperature of any large animal, only 96.6. Birds, on the other hand, have the highest, with 107.6 degrees Fahrenheit.

HUMAN INTELLIGENCE

THREE are seven dimensions of intelligence!

Seven prime elements of intelligence, which combine to make up an individual's mental capacity, have been identified after four years of research at the University of Chicago.

The seven dimensions of intellect, each of them separately measurable, which have been isolated by Dr. Thurstone, are named by him: (1) number facility; (2) word fluency; (3) visualizing ability; (4) memory; (5) perceptual speed; (6) induction; and (7) verbal reasoning.

Dr. Thurstone is chief examiner of the University, and editor of intelligence tests for the American Council on Education.

THE PERFECT TIMEPIECE

THE world's most perfect timepiece is not a clock!

Precision in time has always been a knotty problem for the physicist, the chemist, the astronomer. No longer,

however, need the scientist rely on the astronomical pendulum. Clocks cannot help but be affected by all kinds of influences. The slightest change in temperature acts upon the pendulum, and alters its precision. Electrical clocks are little better. There are bound to be vicissitudes of electric current, whose evenness can be undone by many influences.

Two European scientists tackled the problem, and finally constructed an instrument which does not look at all like a clock. It is a "quartz clock." Its most important piece is a quartz regulator, a prismatic needle of rock crystal, several inches in length. This little needle oscillates no less than 60,000 times a second (about 5,000,000,000 oscillations every twenty-four hours). It is connected with a motor, and in this way checks off regular intervals of time.

The fact that during a half-year's experimentation the instrument indicated a daily deviation of only one two-thousandth of a second from "true" time—ascertained by observation of the stars—shows the remarkable precision of the clock.

THE ELECTRIC TONGUE

SCIENCE can taste via electricity! An electric taster has been constructed by Westinghouse Laborator-



ies. It is used at present to test whether fruit is sour or sweet.

The device works on the principle that sour fruit has a greater conductivity for an electric current. Two needle-shaped electrodes connected with an inserted electrometer are stuck into the fruit. The meter shows whether the fruit is sweet or sour, and how much. You can investigate your fruits now without injuring them in any way!

More SCIENTIFACTS

Coming in the Next Issue

THE IMPOSSIBLE HIGHWAY

By OSCAR J. FRIEND

Author of "Of Jovian Build," "Experiment with Destiny," etc.

Time Marches On Along a Mighty Pathway of Life as Dr. Nelson Traverses an Enigmatic Road to Nowhere!

DR. ALBERT NELSON looked at his young assistant, Robert Mackensie, and scowled.

"So this was just what I needed!" he snapped. "Leave my laboratory and take a walking-tour with you in the Ozarks. Lovely vacation. Bah!"

"But, Doctor," Mackensie protested mildly, "you did need a vacation. I can't help it if we had an accident." A grin crept over his youthful face. "Besides, it's kind of funny—two erudite scientists as helpless as babes in the woods!"

But Dr. Nelson could not see the humor in the situation. They were lost — lost deep in the Ozark Mountains, their compass hopelessly smashed. And that annoyed him no end.

For Dr. Nelson was an orderly soul. He had always been a logical thinker. He had a mathematical mind that clicked like a machine. No loose ends existed for him. That was why he made such an excellent biologist. He traced everything to its source and pigeonholed it permanently within his brain before letting go of it.

To Dr. Nelson, two plus two equaled four, and he had to get that answer before he quit. Every positive had a negative, every cause an effect. There was never any unfinished research work in his laboratory, no litter of paper on his desk, no clutter of stuff in his mind. He repudiated everything which did not have a logical explanation. He had no patience with unfinished symphonies, lady-and-tiger

stories, enigmas, or unsolved mysteries. Quite a definite, positive chap.

That's why he was peeved and exasperated when he and Mackensie came upon the end of the road. It wasn't the cumulative effect of the facts that they were lost, that their compass had accidentally been broken, that they had been pushing on since early morning and it was three o'clock in the afternoon now, that they were weary and scratched up and hungry and thirsty. None of this. It was the inexplicable fact of the road itself.

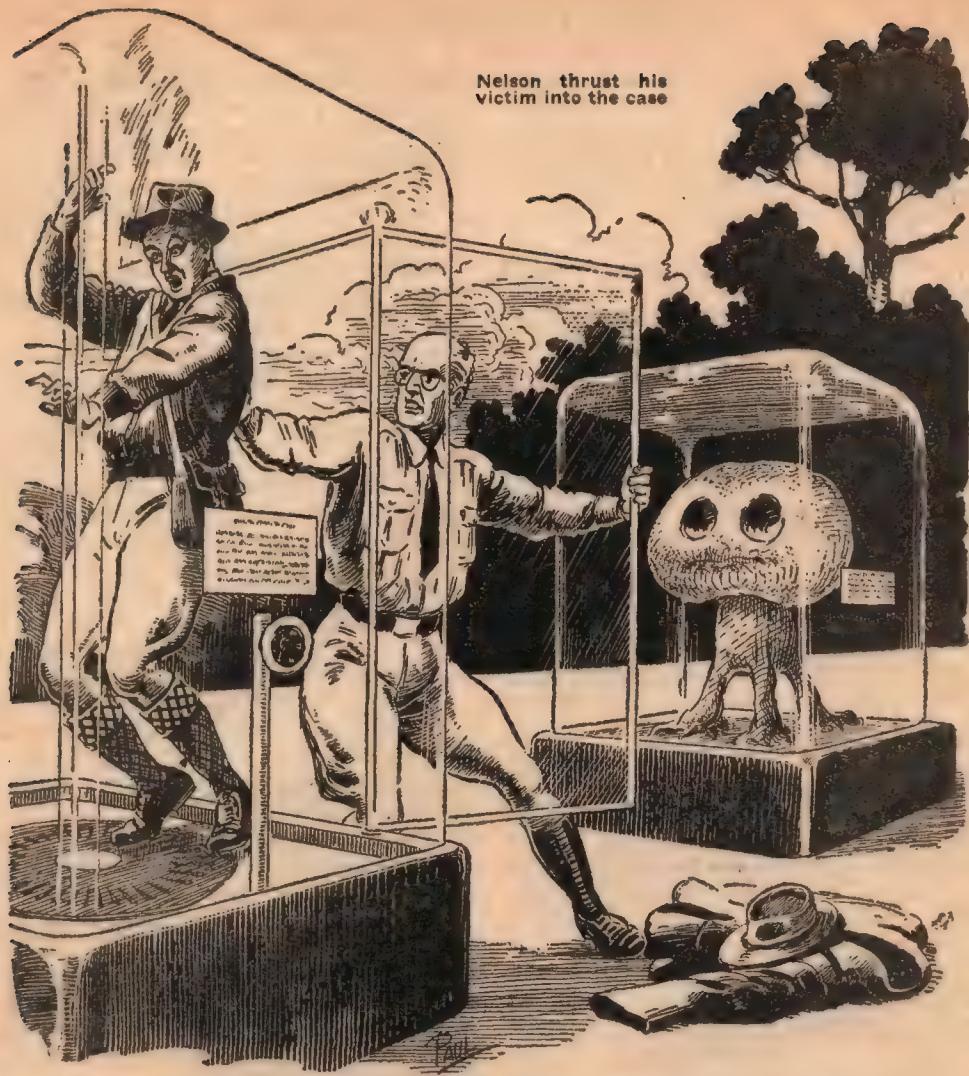
"What is that ahead of us?" Dr. Nelson panted as his keen eyes caught sight of a shining, white expanse through the trees and underbrush. They had been climbing steadily for the past hour, seeking a high spot from which they might survey the surrounding terrain and get their bearings. "An expanse of water, or the sky?"

Mackensie puffed on ahead. His young voice floated back in eager accents.

"It's a road, Doctor! A concrete highway! Thank God, we can find our way back to civilization now."

It was a road all right. Nelson wrinkled his brows in thought as he quickened his pace to overtake his companion. But what was a concrete road doing here in the heart of a wild country which sane white men never even trod on foot? How could there be a cement highway up here in these mountains where there weren't even county side-roads, where only wild game lived and an occasional bluejay

Can You Solve the Riddle of



raised his raucous voice or a lone turkey buzzard wheeled in solitary splendor overhead? And there was something else.

There was nothing peculiar about the concrete slab itself. It was a quite normal specimen of the engineer's and road builder's art. Twenty feet wide, fully eight inches thick, it stretched suddenly away before the two men in a properly graded, sweet white expanse that curved through the pines and elms and cedars and dipped gracefully out of sight over the brow of a slope.

No, it wasn't the construction or condition of the road; it was the very fact of its sudden presence here. Dr.

Nelson became aware of the fact that he had used the adverb "suddenly" twice in as many seconds in thinking of this thoroughfare. That described the thing. Abruptly—just like that—the road began, its near end as squarely chopped off and finished as the shoulders running along the side edges of the best behaved highways. In the midst of a primordial wilderness the road just suddenly began.

THERE was no evidence that it was intended to continue in this direction. No blazed trees, no surveyor's marks, no grading, no sand or gravel or lumber piles, no machinery, no tools,

the Ladder of Life? See Page 88

no barricade, no road marker, no detour sign. Nothing. Not even a dirt road, trail, or foot-path leading in any direction from the end of the concrete slab. Simply a wild and untrammeled hillside in the heart of uncharted mountains, and there, as abruptly as a pistol shot—the near end of a gleaming highway!

The incongruity of it must have finally struck Mackensie in spite of his relief, for the young biologist was standing just short of the end of the paving and staring around him in perplexity as Nelson joined him. His bright blue eyes met the steady brown eyes of the older man, and his face twisted quizzically. He wagged his hands helplessly.

"Why doesn't it go on?" he asked. "Can it be an abandoned project?"

"Whoever heard of even an abandoned trail that didn't lead at least to a house or a shack?" snorted Nelson irritably.

"Can it be a test stretch of road?" suggested Mackensie.

Wordlessly, Dr. Nelson pointed at the road's unsullied surface. There wasn't a drop of oil, a tire mark, a clump of caked dirt from a hoof, a footprint — anything, to mar the slab's virgin purity. And yet the road, beginning here in the thick of the forest, curved out of sight before them as though it led on forever, an important artery of transportation.

"It's a senseless riddle!" snapped Nelson. "And I detest riddles."

"Well, although it begins spontaneously, Doctor, it seems to lead somewhere," Mackensie said. "At least, it will lead us back to civilization. We can solve its mystery at the other end. Are you too tired to go on?"

"No. No," repeated Nelson irritably, frowning along the road. But he felt a vague reluctance to set foot on the slab. Why, he did not know. He hesitated, mopped his perspiring brow with a handkerchief, and gazed around at the deep woods through which they had come. Then he shrugged and stepped upon the end of the road.

Mackensie stepped up beside him and set off along the paving in a swinging stride. Perforce, Nelson fell in step, and they marched together in si-

lence. For a brief space there was no sound at all save the rhythmic tramping of their boots and the occasional slithering noises which came from Nelson's knapsack. This was the little green lizard the biologist had captured some time before noon.

"Always the indefatigable scientist," Mackensie had observed when Nelson had adroitly caught the little reptile sunning itself on a rock and had popped it into an emptied sandwich box for later study.

Now, the noise of the little lizard was the only sound outside themselves which kept them company. It was the queer significance of this that caused Nelson to put his hand on Mackensie's arm and stop suddenly.

"Why are we stopping?" asked the younger man in surprise. "This beats tearing our way through brambles and underbrush by a house and farm."

"Listen," said Nelson.

Mackensie did so tensely. All around was utter silence. There wasn't even a breath of wind stirring the leaves on the trees.

"I don't hear anything," he said.

"That's just it," commented Nelson. "You don't hear anything except the noise we are making. Not even the buzz of an insect—not a bird in the sky—not a rustle in the thickets alongside the road. What became of the bluejays and the gnats that kept us company and annoyed us before we reached this road?"

MACKENSIE'S blue eyes looked startled. Nelson turned to stare along the section of road they had already traversed. It stretched there for twenty yards, white and spotless save for the faint markings of their own recent passage. It was as though they stood alone in a dead and lifeless world. No, it wasn't like that exactly. All around them was the evidence of floral life, but a life in arrested motion. That was it — a technicolor, three-dimensional still—a rigid, frozen world in which only they themselves had the power of motion. It was uncanny.

"Not a bug crawling across the road," whispered Mackensie in awe. "Not even a distant sound to indicate that anything or anybody is on this

planet. But I have a queer sort of feeling deep inside me that — that the forces of life are surging all about us. Doctor, I feel as though this very road is quivering and teeming with life even as it lies rigid beneath our feet. What, in God's name, is all this?"

Nelson lowered his gaze to the area about his feet. Mackensie was right. There was a psychic sort of hum or quiver to the concrete, to the very air about them, and yet everything was so still and silent. Slowly an odd impression grew upon the perturbed scientist.

It was as though his eyes penetrated the fraction of an inch below the smooth surface of the concrete slab. He felt, rather than saw, that this was an incredible highway of life, that billions and billions of living entities had trod this way before him in endless, teeming throngs.

"Come on," said Nelson in a muffled voice. "Let's go on."

It was around the next curve, where the forest thinned away and the road appeared to wind majestically across a series of plateaus on top of the world, that they came upon the first variation to the smooth progress of the road. This was a concrete pedestal about waist high on the left-hand shoulder of the highway, an integral part of the concrete itself. It was as though the road had paused and flung up a sort of pseudopodium at its edge.

On top of this slim pedestal was a cube of what appeared to be quartz glass. At least, it was crystal of some sort, faintly iridescent and sparkling under the rays of the afternoon sun. As they approached, they saw that it was a hollow cube which enclosed a powerful binocular microscope. Its twin eye-pieces, capped against the weather, protruded outside the case. On the flaring top of the pedestal, just below the glass cube and easily discernible without stooping or squinting, was a bronze plate containing raised letters. The inscription was in English.

BOTH men halted in amazement at the further incongruity of this. A fine microscope mounted like a museum display in a wilderness which contained only a deserted concrete

highway! What did it mean?

"My God!" murmured Mackensie. "Look! Read it, Dr. Nelson."

Together they stared at the dark but clearly legible plaque.

UNIVERSAL LIFE SPORES— PAN-COSMIC

These minute cellular specimens are the tiniest evolved seeds of that phenomenon called life, whether floral or faunal, which are self-contained and practically immortal. They are propelled throughout the Universe on beams of light. Peculiarly deathless, they settle like a fungoid mold upon the most barren and arid planet and father all forms of living matter. Their primary origin is unknown.

Nelson whipped the caps from the binocular eye-pieces and glued his eyes to the lenses. He was conscious of a queer sort of magnetic thrill as he touched the glass-incased instrument. The crystal cabinet scintillated and glowed as though endowed with a life force of its own. It was impossible to adjust the controls of the microscope since they were within the glass she'll but this proved needless.

On the field before his eyes, perfectly adjusted, was a typical stained glass slide similar to thousands the biologist had examined. There, immobile, deathless, changeless, were hundreds of tiny gray cells which resembled the various fern molds he had studied more than once, and yet they were different. They were cellular; they were undoubtedly bacteria — but they had a sharply distinct rim or shell which might well have been impervious to the darkness and cold and cosmic rays of outer space. Certainly, Dr. Nelson had never seen their exact like before.

After a careful study, he raised his head, stepped aside, and motioned Mackensie to look. The young man did so.

"Good heavens, Doctor," he murmured. "They don't even take the stain the least bit. They reject it completely, standing out like dots against a field of pale pink."

"Precisely," Nelson agreed, frowning thoughtfully. "And you notice that they are motionless, inert—as though arrested by magic in the midst of their activity."

"Yes," nodded Mackensie, still looking. "Doubtless they are dead."

"I wonder," said Nelson.

"I can't understand it," pursued Mackensie. "Even the most minute organisms would show at least molecular motion."

"Let's go on," said Nelson, recapping the eye-pieces. "I see another pedestal a few yards beyond, on the opposite side of this infernal road."

Mackensie was the first to reach the second queer pedestal with its faintly glowing and pulsing glass case enclosing another microscope. He was already peering through the eye-pieces when Nelson read the bronze plaque below the crystal case.

**LEPTOTHRIX—A GENUS
OF THE FAMILY
CHLAMYDOBACTERIACEAE**

One of the earliest forms of cellular life of this planet, dating from rchaeozoic rocks, at least one billion years old. Filamental in form, with unbranched segments, it reproduces by fission from one end only. Walls of filaments are of iron, deposited around the living cells by accretion. Man and beast are fueled by plants which consume earth elements and build up by chlorophyl sun-power, but *Leptothrix* literally eats iron. Most veins of iron ore have been built by the action of this bacteria.

When Mackensie, dazed and uncertain, removed his eyes from the microscope, Nelson looked. He recognized the specimens instantly. And these bacteria were caught in an immobile net, frozen rigid as statues in the midst of life. When he looked up, Mackensie was already running on to the next pedestal twenty or thirty feet beyond. Nelson followed more slowly.

"Algae!" cried out Mackensie.

NEELSON read the bronze plaque and then stared at the familiar blue-green strands of the primitive water plant which becomes visible to the naked eye as the greenish scum on stagnant pond water. And once again he noted the frozen and arrested condition of the specimens.

"Plankton!" shouted Mackenzie next, reaching the fourth pedestal. "Good Lord, Doctor, this is like—like going through an open-air penny arcade of

bacteriology." He smiled.

That was precisely what Nelson was thinking. He still hadn't solved the enigma of the road itself. The additional mystery of high-powered microscopes mounted here in the open in queer crystal cases he thrust to the background of his mind to be explained in due and proper course. It was, as Mackenzie said, like a laboratory of the gods. Almost fearfully Nelson looked up at the sky as though he half expected the head and shoulders of some super-scientist to materialize from behind a fleecy cloud. But nothing happened. It was still three o'clock in the afternoon. Nothing lived or moved save the two men and the confined little lizard.

One thing was significant to the Methodical Nelson as he plodded along this weird and unaccountable highway. There had been no unnecessary or haphazard placements of specimens. Everything was in logical and chronological order as far as he could determine. The trend was precisely and steadily upward in the mighty cycle of life.

Coming into view before them, lining the highway like trees in a park, were crystal specimen cases of varying sizes and shapes. No longer did a microscope accompany each exhibit. Life specimens now were in forms discernible to the naked eye. A distinct line of cleavage between plant and animal life had come into being, both being carried forward in faithful progression. And in each case every specimen was perfectly preserved and apparently lifeless. The entire array of crystal cases pulsed and glowed in the sun with an eerie life of their own.

Up through the ages ran this bizarre story of life. Through the day of the fossils, the fern forests, the primordial piscine life of the sea, the first conifers, the first reptiles, the age of gigantic reptilian mammals—along the ladder of life they marched, seeing actual specimens no man, presumably, had seen before. It was like a tour through a marvelous combination of laboratory, botanical garden, aquarium, and the Smithsonian Institution.

The two biologists forgot their hunger, their thirst, their weariness. They lost all track of time, although it must have been hours and hours that they

marched along this corridor of still life. It was like looking at color plates in a three-dimensional magazine of the future, or like gazing at stereopticon enlargements of the screen of life. And the sun hung brilliantly in the sky at three o'clock in the afternoon.

The written matter on the various bronze plaques—which was always there, regardless of the size of the display cabinet or the nature of its contents—would have composed a complete and unique thumbnail history of the surging course of that tenacious, fragile, but indestructible thing called life. Nelson began to regret that he had not copied down each one of them, realizing as he did so that it would have been impossible. He wouldn't have had enough paper if his knapsack had been full of nothing else.

MACKENSIE began to mourn that he hadn't brought a camera with him. Some of the specimens were such as man, in filling in the gaps of life's history, had never even imagined. The main enigma still unsolved, Nelson pushed onward with a mounting fever which amazed him. He felt, without analysis, that he was being drawn onward by the hand of destiny, approaching a climax, a height, a fate that was inexorable.

The same fire must have imbued Mackensie, for the young man now marveled at the Gargantuan panorama, at the magnetic oddity of the crystal cases, at the puzzling thought and speculation of how this outré museum came to be, at the impossible fact that time stood still.

And then they came to the first empty display case. It was a little cabinet, and they paused to read the bronze plaque. They had long since passed into a comparatively modern era, reaching a stage of presentation which encompassed flora and fauna as it now existed. Primitive man had already appeared, and his image was in properly spaced and graded cabinets.

Nelson had got a start at his view of the first shaggy brute which was definitely the long-sought missing link between man and the lower animals. A queer and repulsive thing to the esthete,

Nelson the biologist almost worshiped before the lifelike mammal. From there on the story of mankind was written graphically for the two amazed travelers to read.

But here was the first vacant case. Conscious of great annoyance, Nelson read the bronze plaque.

LACERTA VIRIDIS

This green lizard is a specimen of the small, four-legged reptile with tapering tail which, along with related families, form the sub-order of all the *Lacertilia* with the exception of geckos and chameleons, which see.

The biologist raised his eyes. But the case, pulsing and glowing with its faintly bluish-green sheen, unharmed and unbroken, was empty. There simply was nothing within it.

"That's funny," mused Mackensie aloud, as Nelson thoughtfully examined the crystal case which, in this instance, resembled a bell jar. "That's the first gap in all the series."

"Yes," almost growled Nelson as he tugged at the knob of the bell jar. To his surprise, he was able to remove it. Then he saw at the base of the jar, on the flaring ledge of the pedestal, the little wheel which controlled the air-exhausting and sealing apparatus.

He accidentally placed one hand on the spot which had been covered by the bell jar, and instantly he lost all feeling in the member. It was as though his entire hand, from the wrist down, was nothing but a lump of insensate matter. Hastily he snatched it back. At once life and feeling returned.

"What's the matter?" asked Mackensie quickly in professional interest. "Hot?"

"No," answered Nelson, replacing the bell jar carefully. "Just—nothing at all. No feeling. My hand went completely dead."

"Is it all right now?"

"Quite. There must be something about these magnetic pulsations that blanket and cut off the life force without destroying life."

"Then, if that's so, all those—those specimens we have seen are alive? Alive but dormant?"

"I wonder," said Nelson.

Mackensie shuddered silently.

"Come on," he said. "Let's go. I think I see a mountain lion yonder."

KNITTING his brows in irritation at this minor break in this colossal display of specimens, Nelson followed on. The scampering, rattling, slithering sound of the little lizard in the lunchbox in his knapsack was like the annoying impulse scurrying around in his brain. They passed the chameleon, the specimens of wild game and small fauna, and reached the spot where the depicted story of this era of plant life was resumed.

Here, perhaps a couple of hundred yards on from the empty lizard case, Nelson halted in the fashion of a man who has firmly made up his mind. Mackensie looked at him in astonishment.

"Come," said Nelson. "We're going back."

"Back?" echoed the younger man incredulously. "Where? Why?"

"Only as far as the *Lacerta Viridis* case. I've got to. I've just got to. I can't go on."

"But—but, can we go—back?" whispered Mackensie.

This was a startling thought. Nelson had never considered such a possibility.

"Will we have time?" pursued his assistant biologist. "Night may overtake us as it is before we come to the end of this road."

For answer Nelson pointed at the sun. It hung in the bright sky precisely at the three o'clock position.

"Come," ordered Nelson.

Obediently, almost like a man under the power of hypnosis, Mackensie turned and started back along the highway. Nelson paced him. It was as though they breasted a strong and resistant tide, as though they fought a steady and powerful wind. Nelson felt like a man in a dream, almost overpowered with a lethargy he could not understand. Only his indomitable will forced them both onward. And still nothing moved or lived along the entire ghastly highway save the two men, walking in the warm sunlight.

Slowly they retraced their steps and drew up before the empty lizard case.

"Well, we're here," panted Mackensie. "Now what?"

For answer Nelson removed his knap-

sack in a methodical fashion and took out the lunchbox. Pinioning the little lizard swiftly by the nape of the neck, he removed the bell jar and placed the squirming reptile on the pedestal.

Instantly the creature went rigid. Nelson withdrew his numbed hand and stared at the specimen. In lifelike manner the lizard rested on its four tiny feet, body half-coiled, head uplifted, beady little eyes glittering as it stared at nothing.

Primly Nelson covered it with the bell jar and turned the wheel to seal the vacuum. A faint hum resulted from within the base of the pedestal and then died into nothingness. The god of science accepting an offering. When Mackensie tried to lift the bell jar he found it immovable.

The two men stared at each other.

"At least, it is a passable specimen," observed Nelson. "It is similar to the Old World species. Let's go now."

With a quicker step he led the way. All annoyance over the empty case had vanished.

It must have been hours later, and God only knew how many curving miles, when they reached the second and final empty specimen case.

"Look!" cried Mackensie in heartfelt relief. "We are coming to the end of the road!"

NELSON had lost interest in the road. The mighty story of life which had unfolded had swept him up and on in an irresistible surge. It was with a start that he came back to a realization of his surroundings and focused his attention on the distance.

Mackensie was right. About a hundred yards on, ending in a thicket of trees on a downward slope, was the end of the road.

Just as it started, so the road ended—abruptly, inexplicably. Not far from its termination was a specimen case which appeared to be about three feet tall upon its low pedestal. But Nelson was more interested in the seven-foot case opposite him.

TWENTIETH CENTURY MAN

This specimen of the warm-blooded biped mammal with the developing brainpan and thyroidal glands represents man at the physical peak of his evolution. As has

been pointed out through the various case histories, animal and plant life, having come far from a common origin, differing principally in the matter of an atom of magnesium in chlorophyl structure instead of an atom of iron in the hemoglobin of blood, have now passed their separate evolutionary goals.

From this point on, their parallel paths converge, finally uniting once more in a common structure which approaches the apex of mental development.

Dr. Nelson raised his eyes from the bronze plaque. The pulsating hollow cube was empty. There was no specimen. Instead, there was only a door of beveled glass which swung out over the road on invisible hinges, as if inviting a weary sojourner to enter and rest—for eternity.

The biologist frowned in utter exasperation. Why, of all specimen cases, should this one be empty? He pulled restlessly at one ear as he turned to stare along the road. He was annoyed again, disappointed, to note there were no more specimen cases save the one three-foot case at the very end of the way.

The story was almost told. Past hundreds of thousands of crystal cases they had walked for endless hours—only to find this most important case, as far as mankind was concerned, empty. Somehow, Nelson could not go on and leave it thus. His methodical nature seemed to be driving him onward with inexorable logic. His gaze fell upon his companion.

"Mackensie," he said in a queer voice. "Mackensie, come here."

The younger man paled and shrank away.

"No," he cried out, intuitively guessing the other's purpose. "No! You are mad, Doctor. Let's get away from this hellish thing. I—"

He ended in a cry of stark terror as Nelson pounced upon him. The biologist was twenty years older than Mackensie, but he was also the larger man physically. Mackensie had no chance against him. The struggle was as short as its meaning was horrible. In a matter of seconds Nelson had his victim helpless.

"No!" screamed Mackensie, horror dawning in his eyes. "Dr. Nelson, you mustn't!—You can't do this! You—"

He ended in shrill scream after scream of fainting madness as Nelson lifted him erect and carried him to the ajar door of the crystal cabinet.

"It is painless," murmured Nelson gently. "I know. *And why is the case empty*, if not for one of us? Answer me that!"

But Mackensie was past answering anything. He was passing into a state of cataleptic horror.

LIKE a man in a dream, like a puppy controlled by extra-terrestrial strings, Nelson shifted his burden dexterously around to face him and then, balancing himself carefully, he thrust the body of his companion squarely and smoothly into the empty crystal case. The change that took place was miraculous, instantaneous. The texture of Mackensie's body became like marble. Remaining erect, he rocked back against the rear of the cabinet and then forward like a tottering statue.

Nelson quickly pulled the heavy crystal door around, literally closing it in the set face of his companion. With a soft *whoosh* of air, the beveled edges of the door fitted smoothly into the beveled crystal frame—and the last case had its perfect specimen.

The biologist was trembling as he stared into the glazed eyes of his former laboratory assistant. Then he sighed, mopped his brow, and glanced at the sun. It was three o'clock in the afternoon.

Turning slowly, as though loath to part company with the man who had made this incredible journey with him, Nelson strode on to the end of the road.

Reaching that last case, he paused to study the specimen within. Almost in the shade of the thickening trees, the pulsating aura of the case was faintly phosphorescent. But it was the nature of the specimen that fascinated the biologist.

Squat, scarcely three feet tall, pallid and sickly brownish in tinge, the thing looked more like an overgrown mushroom than anything else. A mushroom with a bulging dome that was a horrible caricature of a human head. A pair of enormous orifices denoted what may have been meant for eyes. The mouth was nothing but a seam or a weal which

indicated where a mouth once had been. The thing was sexless and stood upon three rootlike feet. At last Nelson brought himself to read the bronze plaque.

THYROIDICUS—PLANT MAN

The final evolution of mammalian life upon this planet. Composed principally of a fibrous brain tissue and a free iodine producing organism which is the development of what was formerly man's iodine plant, thyroid gland located in the throat, this creature has neither blood nor chlorophyl.

Like *Leptothrix*, this form of life has learned at long last to assimilate its food directly from the elements, transmuting it instantly and releasing free energy. *Thyroidicus*, the ultimate goal of physical evolution, is practically all brain. The next step in the stage of evolution, inevitably, crosses the boundary of animate existence, and life becomes purely spiritual.

THAT was all. The story was told. The end of the road was reached—abruptly. No blazed trees, no sur-

veyor's marks, no grading, no material piles, no machinery, no tools, no barricades, no detour sign. Not even a dirt road, a trail, or a foot-path leading in any direction from the end of the concrete slab.

Simply a wild and untrammeled hillside in the heart of uncharted mountains, and the road which had begun as suddenly as a pistol shot led nowhere and ended as precipitantly.

Dr. Nelson was a methodical and orderly soul. Ironically so, he realized grimly. He hadn't been able to help himself. His cold logic had been tapped to the nth degree.

He thoughtfully turned and stared back along the way he had come. He felt that vague and incomprehensible tremble of vibrant life flowing onward in the road beneath his feet. Now there was not an empty case, not a broken thread in the two lines of specimen cases which stretched off into the ilimitable distance there. The record was complete.

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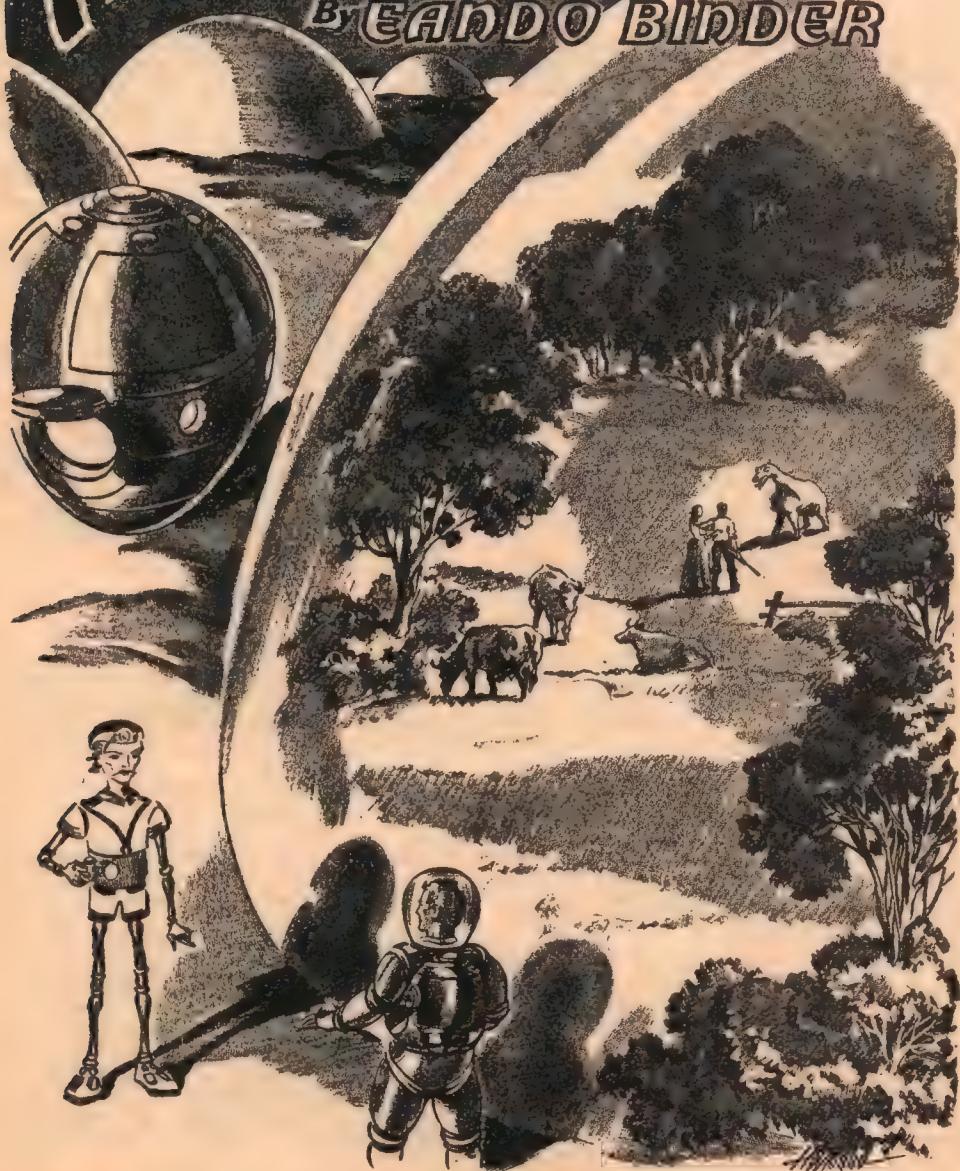
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The SECRET OF ANTONYORK

*A Complete
Scientific Fiction Novel*

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• COMPLETE SCIENTIFICK NOVEL SECTION •



Vuldane

Prologue

AT the top of Mount Everest stand two gigantic statues of enduring diamond, a hundred feet tall. Gleaming in the stratosphere, they rear higher than any other man-made object on Earth's surface, as the two after whom they had been modeled rear higher than any others in human history.

Those were the statues modeled after the immortal Anton York and his mate.

In the year of their commemoration, 4050 A.D., the President of the Solar System Council spoke to a gathered crowd of ten million, and to a television audience of ten billion on nine planets. His voice was emotion-filled and awed, as though he spoke of gods.

"Anton York and his wife are dead. But Anton York's name will live, alongside those of Alexander, Caesar, Napoleon and other empire builders. And Confucius, Christ, Mohammed and other spiritual leaders. And Adam, Jove, Robin Hood and other mythological names. For Anton York was like all these in one respect or more.

"He was born in the twentieth century. Preserved by his father's life-elixir, he lived on, immortally. These great exploits will ring down the hall of history: His defeat of the fifty Immortals who wished to subjugate Earth, in the twenty-first century. His legacy of space-travel to mankind, soon after. His defeat of Mason Chard, the last of the ruthless Immortals, in the thirty-first century. His astro-engineering in the Solar System, giving Jupiter rings, moons to Mercury and Venus, and ridding all the planets of harsh obstacles to colonization.

"But the greatest of all was his return from the deeps of space, in our present time, to wage some titanic battle against the mysterious Three Eternals, who wished to destroy contemporary civilization. We do not even know the true story of it, save in snatches. We know only that the Three Eternals, survivors from some forgotten time—perhaps Atlantis—pursued Anton York's space ship out beyond Pluto, a year ago.

"An astronomer's plates, on that dark outpost, caught something of the event. The space ship of the Three Eternals hurled some

All humanity thought Anton York dead, but the immortal scientist hurtled through the cosmos to the last world—so that Earth might live!

destructive force at York's ship. The latter seemed loaded with mighty energies. Both ships vanished in an explosion that must have rocked the Universe from one end to another. Pluto was shoved a million miles out of its orbit by etheric concussion!"

He paused to let the worlds imagine the incredible fury of that scene.

"We can only surmise at what mighty, unknown forces were released. And we can only wonder why York, to destroy the Three Eternals, sacrificed himself. Evidently he could defeat the Eternals only in that way, in a battle of gods.

"Of one thing we are sure. The incredible career of Anton York is over. We are gathered here to commemorate his memory, in the most lasting material we know, on this highest peak of Earth's entire surface."

The speaker looked over the solemn, hushed multitude packed at the base of the towering mountain. He delivered his funereal text.

"Anton York, benefactor of humanity, is dead!"

CHAPTER I

Another Universe

THOSE words, if they could have rolled by some magic throughout the greater cosmos, would eventually have impinged on the ears of the person in question, and made him smile.

For Anton York was alive.

Yet he had not been sure of that himself, at first. With a shock his brain had awoken. His staring eyes focused on the cabin wall of his ship. It looked as it had always been. But queerly, he saw two walls. It was a doubling effect, as if two superimposed images lay on one another. And he could not move. He was in the grip of some paralysis that locked every muscle in his body, including his lungs and heart. He was not breathing and his blood, chilled and viscous, lay stagnant in his veins.

Yet he was alive, for his thoughts were free. Or was this death?

His thoughts probed out in mental telepathy, which he had used so often with his

wife. He could not turn to look.

"Vera!" his mind called. "Vera, are you near?"

Her mental voice came back, confused, dim.

"Yes, Tony. I hear you. You must be near. I feel as though we are mental wraiths. Is this the life-after-death? How wonderful, Tony, not to be separated after all—" Her psychic tone became startled. "But look! This is the cabin of our ship, even if it appears double somehow. It was destroyed in that frightful explosion caused by the Three Eternals. How can a material ship pass into the life-after-death?"

It was a grimly ridiculous thought.

"No, Vera." York's thoughts were reflective. "The ship wasn't destroyed. Nor were we. It's sheer speculation, but perhaps the explosion acted so suddenly and so powerfully that it blew the ship away intact. Like tornado winds that blow straws right through oak boards without knocking off one grain. Vera, we're alive!"

"But this paralysis—"

"Suspension of life, through the shock of super-fast motion. Germs, in centrifuges whirled at high speed, pass into a dormant state, as Earth scientists know. All our cells have gone as a unit into suspended animation."

"You mean that we'll stay helpless like this? For ages, thinking, thinking . . ." Vera's psychic voice was alarmed, half hysterical.

"No," York answered quickly. "Don't forget we have twice the normal number of life-giving radiogens in our cells. Cosmic rays are constantly pouring into them. The energy stored will sooner or later break the dead-lock. We just have to wait."

COsmic radiation fed itself into their immortality radiogens. Electrical energy, the warmth of life in the last analysis, gradually built up as in a storage battery. The stunned cells, knocked out by the force of the super-explosion, slowly returned to normal.

It took a year.

During that time, happy at escaping the death that had seemed inexorable, they conversed mentally. They spoke of things past, wondering of things present, and looked forward to things future, once they were free. Well inured to the dragging of time in their 2000 years of life, the short year passed quickly to them, where it might have driven an ordinary mortal mad.

Anton York felt the twitch of some buried muscle one day. Others came alive quickly, as if it were a signal. The involuntary muscles instantly took up their given tasks. The heart beat and the diaphragm pumped up and down, sucking air into the lungs.

York leaped up suddenly, only to collapse again with a groan. The atrophied muscles refused to take up their burden that quickly.

A few minutes later he arose again, stronger, and turned to help Vera up. He supported her while her body went through the same phases. Finally they embraced each other, knowing the supreme joy of life, when death had seemed inevitable.

"Tony, dearest, are we truly immortal?"

FEATURING



ANTON YORK

The Man of Tomorrow

Vera spoke, using her vocal chords instead of the tiring telepathy. They noticed immediately that the sound echoed, in the same queer doubling effect of their vision. She went on. "Disease and old age can't touch us. Now even that terrible explosion, violent death, failed! We're like the legendary gods."

"Don't think that way!" York returned almost sharply. "We must never lose our perspective. We're immortals through science. And some principle of science accounts for our escape. I had our energy coils loaded to capacity with power enough to shatter a sun. When the Three Eternals shoved a dis-beam at us and released it, the explosion acted on every atom simultaneously, blowing ship and all away as a unit. Probably at the speed of light and out into remote space."

"The Three Eternals!" Vera burst in suddenly. "If they survived the explosion too, they may be near now, ready to blast us again—"

YORK, reminded of their deadly enemies, was already leaping toward the visi-screen, for an all-around view of surrounding space. Like their eyes, the view-plate seemed afflicted with the singular doubling effect. The firmament of stars around them contained all pairs. But no alien ship blocked out any part of the sky.

"The Eternals aren't here," York announced, his nerves easing. "They must have been destroyed then—no, wait! I see their ship now. Just a speck far away, where they were blown in a different direction."

Vera bent close to the view-plate suddenly. "And look. Another ship is approaching

theirs! A queer ship—”

“Hsst!” York warned. A totally alien ship might be friend or enemy. “Tune in mentally, if you make contact with the Three Eternals.”

Opening their minds full range, they waited to hear any telepathic radiations from the distant scene. At last they heard a voice, in the universal language of telepathy. Yet they recognized it for an alien, non-human voice, by its mental overtones.

“What ship is this?” challenged the voice, as though it were a patrol ship on the high seas. “Answer immediately!”

York and Vera waited breathlessly. At last one of the Three Eternals answered groggily, as though he, too, had just emerged from the same suspended state following the explosion.

“The ship of the Three Eternals. We just survived a tremendous explosion, miraculously. Who are you? Where are you from?” The psychic voice was staccato, peremptory.

“From Earth.” And then, typically, the Eternal spoke angrily. “But who are you to make demands? I resent your insolence.”

“Earth!” It seemed to be a startled exclamation from the alien. “The J-X seventy-seven creatures! You’ve come to rescue—” The words broke off. Then came a horribly merciless tone. “I am sorry.”

In the view-plate, York and Vera saw a green energy-ray stab from the alien ship to the Three Eternals. In a supernal flash of sparks, the ship of the Three Eternals vanished!

The black dot of the alien ship hovered for a moment, as though to make sure of their work. Then it scuttled away, disappearing into the void beyond.

Vera shuddered. “I’m glad the Three Eternals are gone, though I’ve never wanted the death of a human before. They were such evil beings.”

“Evil beings?” York’s voice was tense. “What about those ruthless aliens? They did us a favor, destroying the Three Eternals, but we’d get the same if they found us. Who are they? From what system? Why are they patrolling space?”

Vera had no answer.

“I wonder where we are,” York mused. “We have a lot of things to do and find out. First, this queer doubling of our sight and voices.”

A STRANGE expression came over his face. He strode to his laboratory workroom and for the next few fours labored with his intricate instruments. Vera brought in hot food, in answer to their reawakened appetites. She found her husband tapping his finger on the barrel of an electronic spectroscope. He was frowning, and behind the front was startled disbelief.

“Tony,” Vera asked, “have you found out where we are? Let’s return to Earth. I don’t like the thought of meeting those aliens.”

“Return to Earth?” York had started. He gripped her shoulders. “I just made a rough measurement of the velocity of light here. It’s only a hundred-and-eighty-one miles a second—five thousand miles a second slower

than it should be! And the velocity of sound is quite a bit below eleven hundred feet per second!”

“That accounts for the doubling phenomenon,” Vera returned quickly, for she was no less of a scientist than her husband. “Our eyes and ears are attuned to different rates. But, Tony, you look so worried. At the same instant it struck her. “Why should light and sound travel slower?” she gasped.

For an answer, York swept his hand toward the nearest port. Out there lay the eternal stars, but what had happened to them? Even they were changed. In their many lifetimes of wandering, Anton York and Vera had come to know the star map almost as minutely as one knows the streets of a city.

“Those are not our stars,” York said in a low voice. “Vera, this is not the Universe we used to know!”

After eating in stunned silence, York spoke again, more calmly.

“I see it quite clearly now. The explosion blew us up as a unit—completely out of normal space-time—into a new universe! I’ve suspected for some time that different universes lie side by side, or wrapped up in one another. They occupy the same space and time, but not the same space-time. Notice that distinction. It’s like taking two chemical reagents and mixing them in various proportions, to get many different compounds.

“This space-time, with its ‘shorter’ time and ‘longer’ space—judging from the low light speed—is separate and distinct from our Universe. Yet the two universes are contained in one another like alcohol in water. Earth, in one sense, is no more than a few miles away in space and a few hours in time. In another sense, it’s remoter than the most distant nebula and several eternities removed on an all-embracing time scale.”

Vera’s brows came together over a white anxious face.

“Tony, it confuses me. I’m afraid. I feel as if we’re drooping into an endless pit here. I never felt that way in our space. Tony, let’s go back to our Universe right away.”

He shook his head, telling her with his eyes to prepare for a greater shock.

“We can’t. At least for the present. Our engine, our energy-coils, our generators—all our motivating machines are dead. I tried them. You see, there’s slower energy here too. We’re marooned in this other universe, and drifting like a wandering comet. We’re helpless, too. If those patrolling aliens happen to spy us. . . .”

York left the rest ominously unsaid.

CHAPTER II

Mystery of the Domes

BUT this did not happen. In the following year, York spent mind-numbing hours in his laboratory. Vera took down an endless series of notes. Together they sought to readjust their science to the new conditions.

In one thing, nature’s laws of compensation were automatic. Their eyes and ears

learned gradually to work under new conditions. The irksome doubling effects disappeared. But all else was still a mystery.

York became irritable.

"I'm getting nowhere," he raged. "I feel as helpless as a baby. In our Universe I had a wealth of super-science, by Earthly standards, at my fingertips. Now I can't even make a single reaction motor. Rockets here don't obey Newton's Third Law! It's getting me down. I'm like a Stone Age man looking around and wondering what it's all about. And, Vera, I don't like it."

He went on, betraying a nervousness he had kept under control rigidly.

"The Three Eternals had no chance to fight back when they were destroyed. Neither would we, if that patrol ship found us. But that isn't all."

Both knew without saying that there were other dangers. Already their stored air and food supplies were running low. In their own Universe, York would have laughed and transmuted oxygen and protein from sheer metal, bending the atoms to his will. But here, in a maddening universe with a new set of laws and measurements, he had less command over circumstances than a Neanderthal Man in some 20th century city.

"That sun, Tony," Vera whispered. "It's far past first magnitude now. We're drifting straight toward it. Another year—"

She left the appalling thought unfinished. In another year, unless they achieved a workable motor, they would fall into the huge, blazing sun. For a year it had grown steadily brighter athwart their drifting course. But they might starve first, or be caught by the patrol ship.

They had three ways to die, in this strange, mad universe, none of them pleasant.

THE alien sun grew until it was the size of Sol from the distance of Pluto. They began to feel the slight acceleration, as its tentacles of gravity clutched at their ship. It was a strange, huge star, red as Antares.

Periodically, every twenty-two days, it increased in brightness. At its maximum it was almost blue-hot. Then it declined to the red state again. On and on the cycle went, with the precise regularity of a delicately made clock.

"A Cepheid variable," York said. "Like the Cepheids of our universe, it obeys some mysterious law of waxing and waning atomic-disintegration in its interior. And similarly, if the balance slips at some time, it will explode into a flaming nova. These are very unstable stars. If there are planets—"

He searched with his telescope. It was small, but through a principle of television magnification, had a resolving power ten times greater than a 200 inch reflector. He swept all the regions around the pulsing sun.

"Yes, it has planets, thirteen of them," he announced finally. "We're drifting toward the tenth outermost. We won't fall into the sun after all, Vera. We'll crash on that planet!"

He was grimly humorous.

"Radio." Vera clutched at straws. "An SOS signal might bring rescue."



Vera York

"Or that patrol ship." York shook his head. "But I don't think their race is here at all. This Cepheid sun sheds an extremely variable radiation. Any planet here must have a range of temperature that shoots from frigidity to super-tropical heat every twenty-two days. Evolution must have balked at trying to adjust creatures to such rapid changes." He laughed gratingly. "And in the first place, I can't signal an SOS. There's a new radio principle here, too."

He faced around haggardly.

"Only one chance, Vera. If I can get one little rocket working, we can land safely on that planet."

While the world enlarged to a dull slate orb in the next month, York labored without sleep. He took drugs that would have killed a normal man; and phosphate foods that went directly to his brain without feeding his body. He trusted his tremendous vitality and the cosmic-fed radiogens to keep him alive.

A WEEK before the deadline, a tiny clue came to him—for the first time, the basic laws of the new universe dimly formed in his striving brain. Earth scientists, thousands upon thousands of them, had taken several centuries to piece out the natural laws of Earth's Universe. Alone, in two years, York began to note down the first fundamental rules in a totally new and strange universe where even light-waves slowed down.

"Newton's Third Law, the one applied to rockets, has a clause here! The higher the energy, the slower the reaction. It's almost backward. That means a slow-burning fuel will do the trick where an explosive one won't. Now I'm getting somewhere."

"Hurry, Tony!"

The planet loomed now like a giant blue moon.

Hastily York constructed a wide rocket

tube at the stern. Loaded with slow-burning phosphorus, it belched forth clouds of smoky vapor. It would be useless as a rocket in Earth's Universe. But here it propelled the ship forward with amazing power.

York skilfully maneuvered the ship into a spiral course around the planet, barely in time to stop a stonelike plunge. It lowered screamingly into the atmosphere. The globular craft landed, just before consuming the last of their phosphorus supplies. York and Vera were thrown violently against the wall.

Vera crawled to her husband, weeping in mixed joy and fright.

"Tony, we're safe! The ship held. Tony!"

Groggily he opened his eyes, stilling her alarm that he might have been killed.

"Yes, made it," he mumbled. "New universe can't beat us. Now let me sleep awhile—"

He slept for three days. When he awoke, he devoured the enormous quantity of hot foods Vera had held ready. York relaxed with a sigh. Then he reverted to normal after an ordeal that might have shattered the mind and health of an Earthly mortal. He relaxed only for a moment. Then he was at his instruments, testing outside conditions.

"Air unbreathable, mainly hydrocarbons. Temperature minus one hundred twenty, but rising. The Cepheid sun is building up to its maximum."

They looked out over the alien world. It was flat, barren, blanketed with white, frozen gases. But these were dissipating slowly, swirling up into the atmosphere.

IN a week's time all the white gas-snow was gone. The previously barren loam stirred with life. Weird, saw-edged plant life burst forth and grew amazingly, at a visible rate. As the Cepheid luminary rose to its maximum, it poured down a flood of hot blue rays. Almost abruptly the environment became tropical. Pseudo-palms and ferns reached for the sky.

"Life, after all," marveled York. "But probably only plant forms, enjoying a brief 'summer' of less than two weeks before the Cepheid's decline to 'winter' radiation."

He made a sudden exclamation.

"No, I'm wrong again. See those scuttling little forms among the grasses, like rabbits and weasels? Animal life! Nature is more persistent than I thought. Well, anyway, I'm almost sure rational beings could not have arisen."

"I think you're wrong again, Tony," Vera smiled. "Look there, just over the horizon. I saw it before you awoke. In the telescope it looks like the top of a transparent dome. It may be a city." She gasped suddenly, in remembrance. "Tony, suppose it's the city of the patrol ship!"

York started, but spoke calmly.

"Suppose it isn't. I'll take a look at that dome. I've been trying for ten days to adjust our gravity engine, without result. If there are intelligent beings, and if they're friendly, I can get the data from them. Or at least a few pointers about this crazy universe's laws."

Vera looked worried when he turned to leave.

"You're unarmed, Tony, and on a strange world. Please be careful."

"I won't take any chances," he promised. "We'll keep in telepathic rapport all the time I'm away."

Clad in his spacesuit, equipped with oxygen and temperature control, Anton York moved off into what had become a semi-jungle. As he suspected, the life around him was unstable. The trees were so pulpy that they fell apart at a push. A little spidery-legged creature with feathers ran against his boot. The soft blow killed it. Its body withered away on the spot. In its place, transparent grass shot up six inches in a minute and then crumbled in a gust of wind.

Swift life and swift decay was the rule here.

York plodded on. He felt like some wanderer in a ghost forest, or a jungle-man treading primeval wastes. All the science, weapons, command of natural forces that he had wielded in his own universe were nothing here. He was unarmed, helpless. In direct ratio to his distance from the ship, he grew more worried. What if that dome actually did hold the ruthless aliens who had annihilated the Three Eternals without a second's hesitation?

FOR the first time in 2,000 years, York felt insecure. Before, visiting hundreds of worlds, he had felt himself at least the equal of any other beings.

He resolved to use extreme caution when he reached the dome.

"That's right, Tony," came Vera's clear telepathic voice. She had read his thoughts. "At the slightest sign of danger, race back."

York came upon the dome suddenly. It was fringed about by rampant life blooming under the maximum rays of the Cepheid sun. He gasped. Of clear transparent material, its arc of curvature indicated that it must be at least ten miles in diameter and a thousand feet high at the peak. Only intelligence could have built the structure—first-class intelligence!

A second shock came when he looked in. He had expected a city, a mass of buildings, dwellings, busy crowds performing their daily tasks, bustling civilization, protected under the dome from the constantly changing environment outside. Such should be the logical explanation for this mighty, arcing shell.

But instead—

The scene inside was that of another world. Not a city, it was simply a stretch of rocky greenish ground, with patches of red vegetation. Here and there tall, red-needled trees, like weird pines, blocked the view. The atmosphere around was misty. The whole scene was in stark contrast to that outside the dome.

Did the intelligent race prefer to live in such a back-to-nature setting? Why should a titanic dome, the product of super-science, enclose a queer bit of pastoral scenery? Was it a park perhaps, or some sort of a playground?

York found no answer as he trudged half-

way around the dome. It was all the same inside, and apparently untenanted. That was most puzzling of all. But suddenly he saw movement. He strained his eyes through the distortions of the transparent medium.

Two furry creatures were slinking among a group of trees, within a half-mile of York's position. He could barely make them out as apelike, walking erect on two legs. Their heads were remarkably large, denoting intelligence. Hand in hand, male and female apparently, they stumbled along. They glanced back at times, as though being stalked.

Abruptly another form lunged from behind a patch of red-berried bushes. It was a monstrous form, blubbery of body, revoltingly naked. Little stumpy legs moved it forward lumberingly. It had no claws. Its small head, bearing two saucer eyes, was perched on a long serpentine neck, giving it a perisopic view in all directions.

It looked, somehow, like a cross between a snake and walrus. It was repulsively ugly, but not formidable.

York watched as the two ape beings caught sight of the monster and ran with obvious fear. The beast lumbered after them clumsily. York, unconsciously loyal to the two beings more like himself, breathed in relief for them. They could easily outrun the horror.

But strangely their steps faltered. As though they had run into an invisible lake of syrup, they slowed down, their bodies straining futilely. At last the ape-man faced about, flinging the woman creature behind him. He awaited the attack of the monster.

"The ape-man will win," York told Vera by telepathy, having transmitted the episode. "The monster, though large, has no claws, or biting jaws, or any air of strength. The ape-man should have faced it in the first place. One twist of his powerful hands on that long, thin neck and he can tear the beast's ridiculous head off. The beast is the one who should run."

The ape-man, as though under York's orders, leaped forward to grasp the thin neck with his gorillalike hands. But again something clogged his efforts. His arms fell helpless. He stood rigid. He made no move to escape as the beast whipped out a rubbery tentacle, wrapped it around his neck, and choked him lifeless. Then the tentacle's end probed into the corpse like a proboscis, and drained the dead ape-man to a bloodless husk.

CHAPTER III

Earth Under Glass

ANTON YORK tried to break his gaze from the revolting scene. He saw the woman-creature stalk forward like a robot and submit herself to the choking tentacle and draining of blood.

With a final effort, York wrenched his eyes away. In the act, he knew why it was so hard.

"Hypnosis!" he breathed. "That horrible monster fascinates his prey as a snake does a bird, and the victim is doomed."

"But why do the builders of the dome, who must be higher life-forms than the ape-creatures, allow that to go on?" Vera's telepathic tone was shocked, unbelieving.

"I don't know," returned York. "There's some amazing mystery behind this. The dome-builders might be those same aliens of the patrol ship. I just glimpsed another dome, Vera, a few miles away. I'm going to that one and find out what I can."

"Tony, I'm worried. There is a terrible menace in all this. Please come back!"

But Vera knew that her husband wouldn't. Quite aside from his own problems and danger, York's scientific curiosity had been aroused. He had never, in all their travels among strange worlds, left a mystery unsolved.

The second dome, when York arrived, was exactly like the first in size and shape, enclosing a space about ten miles in diameter.

But the scene inside was vastly different. The ground was sandy and speckled with clumps of oddly shaped cacti life. The air seemed thin and clear, with heat ripples streaming down from the peak of the dome, where a huge gleaming apparatus hung suspended.

York quickly discovered mangy, lean creatures similar to Earthly wolves. They loped after and caught smaller animals, in this cross-section of an alien desert.

Suddenly, from behind a towering rock formation, stabbed a hissing ray. It struck a wolf creature, electrocuting it. York stared as the wielder of the electric gun ran from concealment.

At first glance, York understood why its movements were stiff and awkward, why its skin glinted metallically. York knew it to be a silicon being, one with silicon atoms replacing those of carbon. Intelligence reposed in the flint-scaled face, though it was dead of expression.

The silicon-man took out a sharp knife and began slicing the carcass. With a flint he struck fire, feeding it with twigs of dried cactus. He rolled a strip of flesh in the sand, then toasted it over the fire, finally gobbling it down with relish. Within his stomach, York surmised, some strange chemistry of digestion replaced the carbon atoms in the flesh-food with silicon atoms from the sand "salt."

AS the silicon-man began a second strip, there was an interruption. A large form ambled from behind the rocks. York had to look twice, for it was the same repulsive type of beast that had killed the two ape-creatures in the other dome!

It came forward confidently. The silicon-man heard its approach. He whirled about, drew his ray gun.

"Give it to him!" York found himself urging the silicon-man. "Shoot the beast down."

The crystal-man seemed to make every effort. His gun pointed and his body trembled, but no shot was fired. Eyes fastened on the beast's saucer orbs, he stood as rigidly as a statue. Hypnosis again! The beast seemed to give a silent signal. With what might have been a curse, the silicon-

man picked up his knife, holstered his gun, and trotted away. He looked back once, shaking his fist in a manlike gesture, but with an air of helplessness.

The hypno-beast promptly inserted its sucking organ into the wolf creature's corpse and drained it dry of blood. It could not use the silicon-men as food. But it still had the demoniacal power of chasing them away from prey they had killed.

What was the answer to this amazing riddle? The hypno-beast in two domes, in two different environments, lorded it over other life forms. Why had the builders done this? They could be neither the ape-men, the silicon-men, nor the hypno-beast. For all had obvious shortcomings as beings of great intelligence.

Who were they? Where were they? Why had they built these domes? Were they the ones who also patrolled space?

Driven by the mystery, and suspecting a third dome, York scanned the horizon and spied not one, but two more. He struck out for the nearest. So impatient that he sidestepped for nothing, he bowled over pulpy trees and fragile ferns with his swinging arms. He left behind him a trail of trampled vegetation that was already regrowing behind him.

The third dome was identical with the others. He would have been startled if it weren't. And the scene within, as he expected, was totally different from the other two domes, and also from this planet's indigenous environment.

IT was a cold setting, in the third dome. White snow lay over all, sprayed down at times from an apparatus suspended under the dome's peak. Hardy vegetation existed here that had the peculiar power of motivation, like animal life. Stubby rootlets slowly inched forward the low trees and bushes, seeking a nutritious spot in which to sink the feeding roots. Shaggy white forms, almost invisible against the white background, sneaked among the moving vegetation. It must be bitterly cold in there, far colder than any spot on Earth, perhaps duplicating the frozen wastes of Uranus' moons.

York stared, startled by something.

"Vera, listen as I describe—" When he had finished, he asked: "Does it remind you of anything?"

After a moment her psychic voice came back excitedly.

"Yes. It sounds exactly like the fifth planet of sixty-one Cygni, which we visited over a thousand years ago. But Tony, that was in our Universe! How could that exact setting be here?"

York made no answer. He was watching a scene within the dome. It had a larger scope than he had at first realized. A small city stood under one part of the shell overhang. Solid ice blocks and snow cement composed the square buildings, decorated artistically with shaped icicles and patterned snow crystals. York had seen the same structures on 61-Cygni, unless imagination had filled the gaps of memory after a thousand years. Water was the staple building material, with temperatures ranging far below

zero at all times.

Such was the city. The inhabitants were squat quadrupeds, their four feet flat and smooth so they could glide over snow and ice on these natural skis. All other surfaces of their bodies were covered with fluffy, warm feathers. They were warm-blooded creatures. Their beaked heads held large, intelligent eyes.

At the moment, excitement reigned in the village of snowbird people. The males had collected on the flat roof tops, swinging around catapults of leather and wood. They knew nothing of smelting or metals in their low-temperature environment. The boiling point of water was to them the blast heat of a high temperature furnace.

The attack they prepared for came. York's snow-blinded eyes hadn't even noticed the body of white forms rushing across the open stretch before the village. They were of the same race. York cursed, as he had always cursed over the civil wars of the human race.

The catapults thumped, slinging blocks of hard ice upon the attackers. The latter stood their ground, setting up giant catapults of their own. Great bombs of hard, crushing ice arced into the village, cracking through walls and ceilings.

THE attackers were numerous, the besieged few. Perhaps this was the final assault of a long series of battles. The patched village crumbled, and the defenders were decimated under the bombardment.

York knew that hours had passed. He had watched with a fascinated wonder. In what way did this little battle, in a ten-mile patch of winter-world under a dome, fit in with the general mystery?

And then York saw the finale. From the distance, where they had been concealed by a mound of snow, came a group of naked hypno-beasts! No extreme of environment seemed to bother them. They passed among the victorious attackers, who advanced robotlike into the village. This was hypnosis control on a large scale. The hypno-beasts had directed an army of the bird people against the bird people's own kind! The beast-masters browsed through the village, probing their tentacles into dead bird-men, feeding well of victims killed by their own brethren.

York ground his teeth in loathing and rage at the hypno-beasts. Surely in all the two universes, there could not be a more revolting, dangerous form of life. For a mad moment he beat with his gauntleted fists at the transparent wall that separated him from the monsters, as though to charge in and challenge them. The shell felt as solid and unshakable as foot-thick steel.

"Tony, control yourself!"

York relaxed. "Vera, there's some answer to this. I won't give up. I'm going to the next dome—and the next—"

Three days passed. York again went sleepless and without food, drawing on the super-vitality with which the elixir of immortality had endowed him. He visited a dozen more domes.

In those dozen domes were the environments of a dozen different worlds. The creatures who roamed within ranged from

wormlike crustaceans to great, scaly dinosaurian forms. Intelligence reposed in anything from a dog-sized spider to a ten-foot high mammoth.

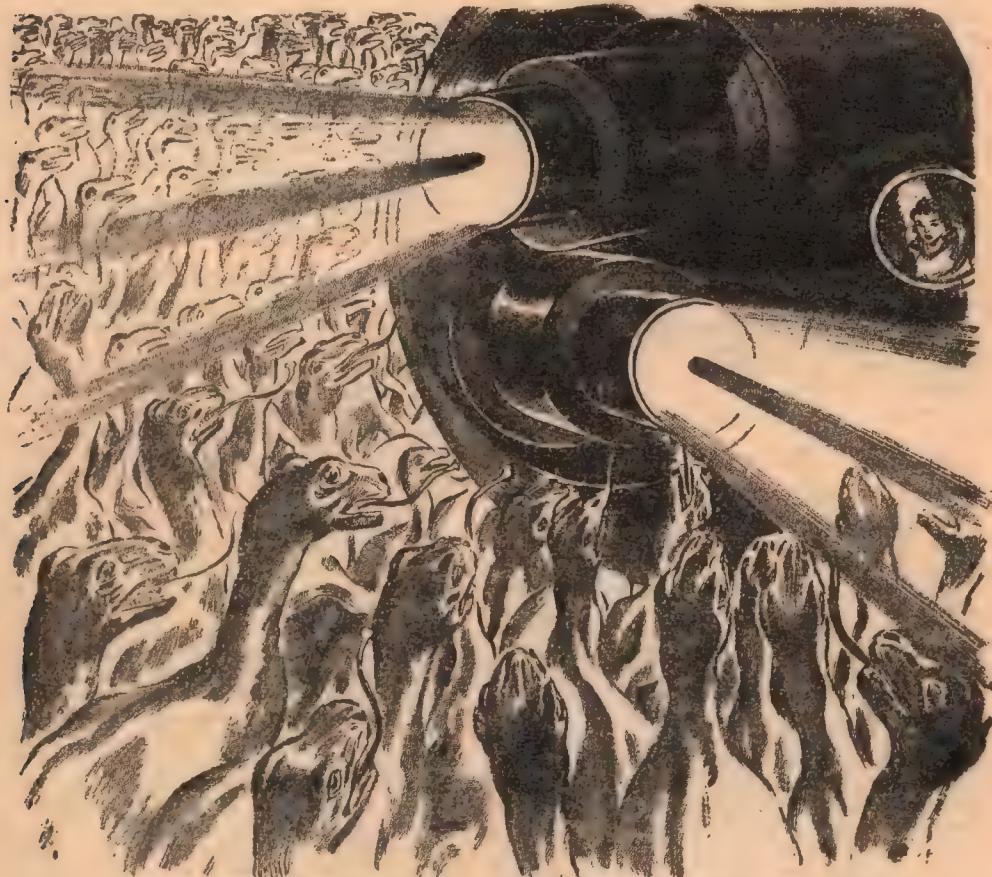
In one dome, blobs of liquid life were held together by thin skins. Rolling through a noisome, swampy purgatory, they devoured everything after spraying out a vicious poison whose touch was fatal.

Most of the intelligence levels were low, held back by inhibiting environments. But in one dome, tailed and fine-fingered beings had mastered a great science. Here too was civil war, with most of the beings dominated by the hypno-beasts, slowly conquering the rest.

In the space of a few hours, the planet's surface was bare, wind-swept, as he had first seen it. He was on a high knoll, and when he looked around, he gasped. Within his range of vision now were dozens—no, hundreds—of the domes, in all directions. They marched down the horizons as though beyond them were hundreds more.

York was suddenly struck by something vaguely familiar in the sight. He squinted his eyes so the wide sweep of the planet below and the sky above were narrowed.

"Vera!" he telepathed excitedly. "I think I know now, partially. This is like a vast laboratory. Those domes are bell jars, in some stupendous series of experiments. The



The beasts poured back a savage tidal flood of hypnotic force

The hypno-beast was in every dome! It was the sole common denominator of the baffling mystery. But what could be the purpose of the builders?

TRUDGING to the next dome, a queer phenomenon overtook York. With the suddenness of a dream ending, the flimsy life forms of the planet faded away. York watched the horizons melt down, as all the vegetation went to seed, dried to brittle dust. He looked up. The Cepheid sun had passed its maximum. Temperature was declining rapidly, and the short "winter" was approaching.

dome builders are the scientists. The creatures within are guinea pigs of this macrocosmic research!"

"That sounds logical, Tony," Vera returned. "But for what purpose? And why should there be hypno-beasts in every dome?"

York pondered.

"The answer might be simpler than we suspect. The builders must be super-scientists, greater than any we've yet met. I am not excluding the Three Eternals and ourselves. They have roamed all through this universe, carrying back 'samples' of various worlds. Like biologists breeding cul-

tures of mice or fruit-flies, they are carrying out a tremendous observation of hundreds of life forms. This must have taken centuries. The purpose behind it must be something vital to them. What can it be? Hundreds of life forms from all over their universe, pitted against the frightful hypno-beasts—

"From our Universe, too!" interposed Vera. "I remember that winter-world of sixty-one Cygni clearly. The one under the third dome you visited was from there. Tony, what does it all mean?"

York had now approached the next dome.

He glanced in. Again he gazed upon an alien scene. Leafy green trees dotted a woodland sward of rich emerald grass. The air above was blue. Puffs of soft clouds drifted down from an apparatus at the dome's peak.

Not far beyond, a field of golden grain rippled as a warm breeze rustled over it. Several four-legged, horned and hooved bovine creatures grazed on the grasses beside a brook that wound through sylvan glades. Little bright-colored birds piped from high branches, though York heard no sound through the transparent shell. A red-furred animal crept forward and suddenly leaped. A startled white-furred creature bounded away like a rabbit—

"Tony, don't you recognize it?" Vera's psychic voice was tense, as she read his transmitted description. "It's our own Earth!"

CHAPTER IV

In Earth's Dome

YORK jerked violently. He had been staring impersonally, as he had at all the other alien environments, without realizing it was shockingly familiar. The blind spot in his brain had suddenly been dissolved.

"Vera, you're right!" His telepathic voice was a whisper. "It's a ten-mile section of our own native world, down to the last blade of grass. Good Lord, if there are Earth people here, and hypno-beasts also—"

Abruptly York's whole perspective changed. Before he had been scientifically fascinated, altruistically enraged at the dominance of the hypno-beast in each dome over races with which he felt no kinship. Now the hot blood pounded in his veins. In here must be his own people, his own kind. The race that had given him birth. The people with whom, though he was half a god above them, he felt the ties of blood brotherhood.

"The builders!" he shouted aloud in his suit, stunning his own ears. "Where are they? I must find them. They can't do this—"

He broke off. Something within the dome had caught his eye.

A man and a girl emerged from the shadowy forest, scaring away what York now recognized as a fox and a rabbit. They peered carefully in all directions and then advanced into the field, toward the cows. The man carried two empty buckets. Over his shoulder was slung a rifelike weapon, and in his belt was an unsheathed knife.

Both were dressed in hides and woolens. The setting was pastoral, very near to the ancient pioneering days of America in the remote nineteenth century.

York knew nothing of those days personally. Earth for two thousand years had advanced to a much more scientific civilization. But the scene struck chords of aching kinship. This was a part of Earth, no matter if from a far past, and those two were his own people. If he could talk with them, they might explain this incredible mystery.

He pounded on the glass of the dome with his gauntlets and shouted, hoping to attract their attention. They were within a few hundred feet, but they took no notice. York desisted. Perhaps the dome was so polarized that they could see nothing but a blank gray wall.

York watched.

The couple reached the cows. The girl began milking, while the young man stood on guard, peering about cautiously. But gradually he became lax. His eyes wandered toward the girl herself. He spoke to her, smiling, and she smiled back. At times they laughed and he bent over once to touch her hair.

THE love of a man and a maid— It was here, too, under this prisonlike dome, on an alien world, in an utterly strange universe.

"Tony, it's wonderful and it's horrible," Vera said. "Wonderful that love can survive any twist of space and time, but horrible that these two have been taken from their home world. Do you suppose the builders watch somewhere, through some instrument, as if at ants?"

"Hush!"

York spied a slinking form among a patch of trees at the edge of the pasture. It was another man. He had unslung his rifle. He was kneeling now, taking aim for the man beside the girl.

York pressed his face against the dome glass and searched back of the man. He saw it suddenly, the pink-skinned, oily bulk of a hypno-beast. The man kneeling and shooting was under the beast's dominance, ready to kill at his bidding!

York screamed in warning. Then, realizing the uselessness of that, he concentrated on hurling a powerful telepathic warning. In all his wanderings throughout the universe, he had never yet heard of a substance that could stop the super-penetrative radiations of thought. But the dome did. His psychic vibrations rebounded with such force that they stunned his mind like a sledge-blow.

Yet perhaps the tiniest of thought impulses wormed through. The young man beside the girl turned uneasily, gripping the stock of his rifle. That move saved him for the time being. The shot ripped through the air from the ambusher, grazed his shoulder. Instantly he ducked, shouting to the girl. She flung herself flat in the grass, overturning the milk. The two cows lumbered away, lowing in fright at the sharp report. York filled in the sound sequences in his own mind.

Flat on his stomach, the young man unlimbered his rifle and cautiously raised his

head, searching for his enemy. A puff of smoke from behind a bush and a shot that whined over him gave him the clue. He fired back. A dozen shots were exchanged. One or the other was marked for death.

York ground his teeth when a shot from the attacker struck. In agony the young man doubled up, forming a better target. A second shot mercilessly crashed through his head. He sprawled out in death. The girl leaped up and flung herself on the body, weeping. Then she sprang to her feet and ran, as the victor came racing up, evidently to capture her alive.

BLINDLY the girl ran toward the dome shell. The man had cut her off from the concealing forest. Back of them the hypno-beast, who had instigated the tragedy, waddled up to the corpse. It occupied itself with its vampirish meal, as its brothers had over and over again in the other domes.

The girl was trapped. She ran to the dome wall and beat against it with her tiny fists, screaming. York moved to the spot. He saw her clearly, but she obviously saw nothing beyond the wall. She did not see that York stood there nearly mad with helplessness and fury. He could not answer the girl's pitiful cries for help.

She turned her back to the shell as the man came up. He was young, too, not vicious in appearance at all. But behind his youthful features was the mark of mental slavery. He was the living zombie of the hypno-beast. He spoke to her, and his face was strangely gentle.

York, no more than ten feet away outside the wall, was able to read their lips.

"Mara, why do you run from me? You loved me once. Come with me to our village."

"Yes, I loved you once," returned the girl, looking at him in pity rather than fear. "But now you are a slave of the Beasts. And you killed Jorel ruthlessly."

"But only at the command of my master. I did not want to." His eyes were pained and pleading. "Forgive me, Mara, and come to live with me. You did not love Jorel. What else have we to look forward to, save a little happiness, in this tiny world of ours?"

The girl's eyes blazed. "Why did you not kill the Beast, Mantar? Look, he squats there, unsuspecting. Shoot him!"

"I cannot!" The man shook his head. "Mantar—for me!"

He looked at her and suddenly his face grew determined. Whirling, he flung up the rifle, taking aim at the feeding bulk a hundred yards away. It was a large target. He couldn't miss. York's heart leaped in hope, that the girl's must have.

But before a shot rang out, the Beast's serpentine neck twisted. Its saucer eyes turned hypnotically on them, as though it kept mental tab on its slave. Mantar made a tremendous effort to press the trigger. His whole body trembled. But with a groan he lowered the weapon. The girl attempted to seize it, to do it herself. Now Mantar, under dominance, resisted her.

"I cannot," he said wearily. "I've tried before. All of us at the slave village have

tried before. We cannot break that horrible power the Beasts have over our minds." He turned to the girl. "Mara, run! You are of the fortunate ones who can resist. Run for the forest. I think I can resist my master's mental command long enough to let you escape. Hurry!"

HE gave her a push. But the girl turned back, and flung her arms around his neck.

"I can't. I still love you, Mantar. I will give you what happiness I can. I will go with you."

"No, Mara. It means slavery. Go, please."

But the girl clung to him. Then it was too late. The Beast left its ghoulish feast and advanced. Arm in arm, the pair walked toward it, to return with it to the slave village. On their young faces was written the bitterness of their chained lives under this dome lighted by an alien Cepheid sun.

York turned away as if from an unreal drama on some dream stage. Tears of helpless rage misted his eyes. Two thousand years of travel and observation among many civilizations had not made him callous to the fundamental decencies of life.

"It's awful, Vera," he said dully. "If I were in my own Universe, I'd blast down this dome on the spot and wipe those Beasts out to the last cell. Here I'm helpless even to get in." A determined note rang in his psychic tone. "But I will get in. I'll come back to the ship and conquer this universe's science laws, no matter how long it takes. And then—"

He was interrupted.

Over the bulge of the glass dome appeared a small ovoid ship. It swept down swiftly, darting back and forth as though searching. Instantly wary, York stood stock-still. Movement would betray him.

But the occupant of the craft seemed to spy him. It dropped down lightly and landed a dozen yards away. A hatch opened and a figure stepped out. In its hand glinted what could only be a weapon.

"Tony, what's wrong?"

"Silence, Vera," shot back York. "Don't contact me again unless you get my signal. On your life!"

Obediently no telepathic sound came from Vera.

York transferred his attention to the visitor. He was a travesty of a man, with spindly legs and arms, thin flat-chested body, and delicate tentacular fingers. Sharp, shrewd features peered inquisitively. Wearing no space-suit, he seemed perfectly at home in the bitter cold that York could not have survived for a minute. He breathed the hydrocarbonous air without discomfort. The forehead was low, topped by feathery hair, but the cranium in back bulged grotesquely. Intellect supreme reposed there.

"Who are you?" he demanded, in the universal language of telepathy. He answered himself. "You are obviously one of the J-X-Seveny-seven creatures. Earthmen, you are called. I was up in the conditioning apparatus when I thought I heard a powerful telepathic shout, and came to investigate. How did you get out of the dome?"

THE being's canny eyes looked at York suspiciously.

"Or did you come from Earth? A ship from Earth was recently intercepted. I thought I heard you exchange a telepathic message with someone. Have you an accomplice? Where is your ship?"

Staccato, peremptory questions, they were just like those shot at the Three Eternals, before they were destroyed.

York faced a dilemma, greater than any before. If he revealed the true story, the ship would be found, Vera captured. Both would then be helpless. York would have no chance to piece out the new science of this universe. He would have no future chance to face them, armed and powerful. These thoughts that flashed through his mind, he willed in a closed circuit, so the alien would not hear. There was only one solution.

"I have no ship," he returned in broadcast telepathy, knowing Vera would also hear. "I was in the dome. I built this space-suit, hoping to escape. Somehow, a few minutes ago, the dome wall where I sought an opening suddenly weakened and I fell through. I don't understand it. It simply happened."

York held his breath. Only one thing made the thin story plausible. The dome must be an energy shell, not a matter shell. This York knew from the fact that his telepathy had not penetrated it. Matter was utterly transparent to thought. Therefore, if at times the energy shell could conceivably weaken in spots, one might fall through.

The being eyed him closely, suspiciously, but also with a certain disdain. It was not worth his continued attention.

"Come," he said. "Back you go. You won't be lucky enough to fall out a second time."

He extracted a queer, flaring-ended instrument from his belt and trained it on the section of the dome wall nearest them. Some force sprayed out in a six-foot circle, neutralizing the dome force. A push sent York through, along with a rush of hydrocarbonous air.

When he turned, he saw only a dull gray wall, blocking off all view of the outside world.

CHAPTER V

Battle with the Beast

HE turned. He was within the dome, in the transplanted patch of Earth. He knew no more than before of the scheme behind it all. But some of the people here might furnish clues.

He stepped forward eagerly. Only one thing bothered him—his completely severed connection with Vera. Within himself he prayed that she would not foolishly wander from the ship and into danger.

For now he knew that danger supreme lurked behind all this.

He walked a hundred feet before he thought of removing his suit. He slung it over his shoulder and went on. He drew in deep lungfuls of air that had all the peculiar tang and sweetness of Earth's atmosphere. The builder-scientists had done a remarkable job of duplicating the Earth

environment. It was pleasantly warm.

For awhile, wandering through a cool forest in which birds sang and squirrels chattered, York lost himself in a pleasant sense of well being, after the irksome period in the clumsy space-suit.

The sleep that he had long denied himself conquered him. He lay down in a soft patch of grass, passing off into restful slumber.

He awoke at a soft touch on his cheek.

Startled, he looked up into the face of a girl. It was a lovely face whose blue eyes and warm smile seemed meant only for him. The girl sat beside him, apparently having been there for quite awhile.

"What is your name?" she asked. "I am Leela. I watched you sleeping. You are good to look at."

York understood, though the words were a form of English queerly slurred.

"Anton York," he returned, trying to ease his archaic accent to something approaching hers.

The name that would have made any contemporary citizen of Earth freeze into awe and incredulous wonder failed to bring more than a welcoming smile to the girl's lips.

"An-ton Y-york," she repeated. "Anton York. I like it. And you are nice. I love you!"

Without another word she threw her arms around his neck, kissing him. York gasped at the girl's directness and pushed her away gently.

"Just a minute," he objected, and for perhaps the first time in centuries, he stammered a little. Fleetingly he felt glad that the wall of force kept Vera from knowing about the kiss. "Certainly you don't mean what you say—"

"But I do," insisted the girl softly, kissing him again. "Don't you want me to love you?"

York had to think for a moment. And for a moment he glanced around dizzily, aware that the girl's presence made the setting seem almost a paradise. Then his eyes caught a glint of pink skin a dozen yards away, behind leafy bushes.

INSTANTLY the camouflage that had made the place seem so wonderful vanished. It was in reality a hell, in which the hypno-beasts not only played man against man, but woman against man!

York pushed the girl away. The monster, divining that it had been seen, lumbered forward. Over York swayed the serpentine neck and gleaming eyes of the Beast, reminding him of all the tragedies he had seen, in this dome and the others.

York sprang erect. Their eyes locked.

York's first impulse was to dash at the monster and twist its thin neck. But when he tried, he had the sensation of plunging into an invisible flood of force that tore at him and beat him back. It came from those glittering saucer eyes—the hypnotic force!

York tried to wrench his eyes from the Medusa stare that turned him to helpless stone, but failed. He fought the intangible force for a stubborn minute before he eased back.

Still he could not tear his eyes away. Now the force changed. Like a resistless

gravity, it pulled him forward, but at the same time locked his arm muscles. He fought to strain backward against the ghostly hands that seemed to draw him forward. One step—two steps—He advanced like a bird caught in the spell of a snake.

The dome, trees, grass, girl—all had vanished. York saw only two enormous, deadly, compelling eyes that seemed to grow and fill the whole universe. He did not even see the quivering tentacle that stretched in anticipation for his throat.

But all the while, within York, something had been working. His subconscious mind gave the call of alarm. His immortality radiogens, stored with cosmic energy that constantly battled the poisons of old age and the raids of deadly germs, released a tide of power to his brain.

York stopped, stiffening, fighting the invisible force with renewed strength. The hypnotic force gave one final tug. York swayed, straining, and then took a step backward.

The spell snapped like the twang of a bowstring. York had won.

He leaped forward, but now in command of himself. The Beast bleated in fear, trying to run. York easily overtook it, grasped the neck and wrung it like that of a chicken. The head drooped on its broken neck. The hellish eyes glazed. The body thrashed wildly for several minutes before it finally lay still in death.

York stared at it with hands on hips, panting more in loathing and rage than exertion. Never in all his exploits had he felt more completely satisfied. He had destroyed a fleet of powerful ships once, and moved worlds, and wielded a godlike science. But here with his bare hands he had killed a repulsive beast. That was his supreme achievement!

AFTER awhile, he smiled in detached calm at the strange contrast between this event and the others in his stirring career. His thoughts were terminated by a pair of soft arms that stole about his neck.

"You have saved me—freed me!" Leela murmured. "Now I truly love you. Take me with you."

York disengaged himself firmly.

"Leela, I have a wife. I've had her for a long, long time and wouldn't change now!"

He wondered what she would say if he told her he was two thousand years old. He decided not to, for the present.

"You have a—mate?"

"Yes." York was relieved, for she did not press her attention. "Now tell me about this beast, and you." To himself he mused: "Beauty and the Beast."

"The master brought me here, where the Free Ones often come. If we found a young man—as we did you—I was to lure him with me, away from any others. It was a hateful duty, please believe that. Then the Beast would either kill him or bring him back to be a slave. The Beasts use all sorts of means to reduce the numbers of the Free Ones. They are trying to kill off all those of the Free Ones who are too mind-powerful to become slaves."

"You mean there are certain ones here

who can resist the Beasts' spell, like myself?"

The girl looked at him, puzzled.

"Surely you know that. Why do you ask questions as though you have never been here before?"

"I haven't," York said. "I came from outside the dome wall."

She stared at him in sudden astonishment, at his strange clothes, at his oddly glowing eyes, the sign of immortality. After a moment, shrugging helplessly, she answered his questions.

"Yes, many can resist the spell. And each generation there are more."

"Generation!" gasped York. "You've never heard of me, Anton York? You've never been on Earth?"

"Earth? You mean the Original World, which our forefathers came from, they say. No, of course not. I was born here."

"And how many generations have there been, according to that story?"

"One hundred."

ONE hundred generations! At least two thousand years! For twenty centuries Earth people had been under this great dome, living and dying, in some gigantic experiment carried out by the dome builders. York shook his head. More and more it loomed as something vital and far reaching—and sinister.

"Do you know why this was done?" he pursued. "Why your forefathers were taken from the Original World and brought here? Or where the hypno-beasts came from?"

"I know little," vouches the girl. "But perhaps at the village of the Free Ones some of the learned men know. Come, I'll lead you there."

Glancing at him in growing wonder, she turned. York followed.

The way led out of the small forest, into open land. There were more grazing lands for cattle and beyond lay a checkerboard of tilled fields with ripening crops. Nut-brown men labored among them and waved greetings. They all had rifles and looked cautiously behind York and Leela to make sure they were not slaves of the hypno-beasts, on some sinister errand.

The village two miles ahead struck a chord of ancient memory in York's mind. It was a stockaded camp, surrounded by a wall of high wooden posts with here and there a lookout station. Within were log cabins and horse-drawn wagons and buckskin garbed people. It was a setting that had vanished from Earth's history since the nineteenth century. It was here, reincarnated and apparently jelled. Why?

York's mind bristled with unanswered questions. He was impatient when an elderly woman spied them. She dropped an armload of kindling wood and hugged Leela.

"My child, my child!" she cried, yet with a stoic lack of tears in her motherly joy. "You are back. I thought I'd never see you again. It's been a year. Leela, my baby—"

"He rescued me." Leela pointed to York. An eager crowd formed around, shouting greetings to the girl who had miraculously returned from the slavehood of the Beasts. "He killed my Beast master with his bare

hands!" She told the story.

The crowd gaped at York in awe. As much, York mused, as the peoples of the thirty-first century had gaped at him for moving worlds. Here he had done nothing more than wring a Beast's neck. He hadn't used a single scientific principle except that a broken spine caused death.

York made an impatient gesture and the girl understood. She led him to the center of the village where a two-storyed cabin stood, guarded by two long-haired stalwarts with rifles. One of them started and greeted Leela with a hug and kiss. York smiled at her hungry response. It relieved him entirely of his role as hero-rescuer, with which she had girlishly surrounded him.

TH E young man stuck out his hand, after the story, and wrung York's hand with a grip of steel. No weaklings, these men. Then he spoke hesitantly.

"According to custom, Leela is yours."

"But I have a mate," York returned quickly. "She is outside the dome wall." He began to explain. Seeing their blank stares, he asked again for an audience with those in authority.

"You mean the Congress." The young guard went in and returned after a moment, nodding. "They will see you."

The Congress proved to be a group of ten elderly, gray-haired men, past the days of physical activity but wise in years and experience. They listened as Leela once again gave the details.

"It is a strange story," said Robar, the head of the council. "Who are you, Anton York? I have never heard the name York among our people." There was suspicion in his voice, and in all their stares. "You may be from the Beast village, sent as a spy! The Beasts try all sorts of tricks in their attempt to subdue us."

The atmosphere became tense, and the young guard even raised his gun threateningly.

"No!" It was Leela who sprang to York's defense. "Don't forget I was in the Beast village for a year. The name is not known there, either. If he is a spy, so am I, for I came from the Beasts."

The impassioned words served to heighten the tension, included the girl in their suspicions. York stepped forward with determination.

"Listen to me. I have lived for two thousand years. I was born on what you know as the Original World, in the twentieth century. In the year seventeen-seventy-six, thirteen colonies in a land called America declared their independence from a land across the Atlantic Ocean. They formed a Congress. Your Congress comes from that. In the following century, the thirteen colonies grew, pushing westward against redmen called Indians. Eventually the land stretched from ocean to ocean. There was a Civil War, the assassination of a great man named Lincoln. Then an industrial empire arose, oil was found, gold. A steam railroad spanned the continent. Buffalo herds were exterminated."

Excitement grew in the men's faces.

"It fits in with our legends," whispered

Robar. "The thirteen American tribes—the redmen—the Big War—buffalo vanishing." He looked at York with sudden awe. "We believe you, Anton York. You have come from the Original World to help us!"

"If I can," York nodded. "But first I must know all I can. What do your legends tell of coming here?"

RO BAR pondered, as though searching misty impressions handed down from father to son.

"Little. Until eighteen-eighty-eight, our forefathers lived on the Original World, in a village like this, called Fort Mojave. They fought the redmen at times. But one day strange flying ships appeared, against which their guns were useless. The whole village of a thousand men, women and children was forcibly taken here. At first there were no Beasts. They lived with little trouble, though sad at being taken for their home world. Then the Beasts appeared suddenly, and life became a constant battle against them. So it has been for generations."

"But why were they brought here?" York queried. "And why were the hypno-beasts introduced into this bit of transplanted Earth?"

"It was never known. Not one glimpse of those mysterious people is recorded. Life has gone on, as it must. We have almost come to forget how it all started. All we concern ourselves with is the survival against the Beasts."

York bit his lip. The mystery was still unexplained. The dome builders had not vouched one item of information to their bell jar specimens. Nor, probably, to any of the other kidnaped beings in all the other domes.

Rage shook Anton York. It was cold-blooded, autocratic, cruel if not actually vicious—this experimentation with generations upon generations of poor, marooned groups of beings. Something must be done!

CHAPTER VI

Other Eyes Watching

IN THE following days, York found out all he could ever find out, under the dome itself. The village of the Free Ones housed about six thousand people. Their fields and hunting ground occupied a little more than half of the total space under the dome. Beyond a narrow river that bisected the area was the territory in control of the hypno-beasts and their mental slaves. It was understood that the slaves numbered about four thousand. But their life-span was short, for the Beasts bred them as food.

In all, then, there were ten thousand human beings under the dome, in this isolated bit of Earth. That meant over three hundred persons per square mile, more crowded than Europe had been before the scientific era of soilless crops! Under those circumstances, waging a grim battle against the Beasts constantly, science had not had a chance to advance. The few deposits of metal ores and important minerals had long since been worked out. Metal was hoarded like gold.

York's observations included the river. Watering the territory, it sprang from underground, near one dome wall, and vanished underground again at the opposite side. A thousand feet above, under the center of the dome, he could vaguely see the giant, gleaming apparatus that duplicated sunlight in regular twenty-four hour periods. At times it puffed out clouds, showers and even fogs. Outside the dome was a hydrocarbon atmosphere, a climate ranging from Uranian cold to Mercurian heat under a variable Cepheid sun. In here was a bit of Ireland or California.

The builders had done a perfect job. But why? The question rang like a gong in York's mind. And gradually he came to have the feeling of being watched. He sensed eyes above that looked down, coldly and scientifically, watching over all and recording the pulse of life beneath. It was a maddening sensation.

York felt like screaming at times, though for two thousand years he had learned to control his emotions with almost godlike equanimity. The other people had come to accept dome life as normal, natural, and all else as illusion or legend.

York temporarily shelved the matter of the grand purpose behind all this. The immediate problem was the hypno-beasts. If he could do something against them, he would perhaps be foiling in some small way the scheme of the master-scientists.

ONE horrible thought lurked in his mind. Suppose the dome builders were propagating the hypno-beasts for the eventual purpose of dominating the universe with them?

"We hope to conquer the Beasts in due time," Robar informed him. "In each generation a higher percentage of the children are almost completely immune to the Beasts' hypnotic powers. For the first thousand years, the village of Free Ones was small and barely escaped extinction hundreds of times. But in the past thousand years our numbers have increased. Today we outnumber the slave group. In another few centuries—"

"Too long to wait," York interrupted. "The hypno-beasts are semi-intelligent, but not scientific. Science can destroy them. How do your guns operate?"

Examination proved that the rifles were models of the flint-lock muskets of the nineteenth century. The bullets were of hard wood, to conserve metal. The propellant was powdered charcoal. Because of the peculiar laws of this universe, the mere firing of a pinch of charcoal had the power of gun-cotton, as York's rocket had worked with slow-burning phosphorus.

"There's some all-embracing equation behind it all," York told himself. "If I could only find it, I'd have the power to wipe out the Beasts, blast down the dome, and face the master race—"

A horn sounded, on this third day. It was the alarm of attack. Instantly the village mobilized. Men marched to the river, York with them. The enemy troops had crossed in wooden boats and now lay scattered behind bushes and low hills. The Free Ones

took to cover and it settled down to sniping.

York, with a rifle resting in a tree crotch, could not bring himself to fire at the figures he sighted now and then. They were human, after all, even if bent on killing their own kind under the command of the hypno-beasts. The Beasts were there, across the river, directing their forces by long-range hypnosis. York could feel the subtle pull of it.

The sniping dragged on for hours, till the Free Ones flanked and drove the attackers back. They did a revolting thing. Hoisting their dead to their shoulders, they deposited them on the other bank, at the feet of the Beasts, who then fed. That seemed to be the sole purpose of the attack, unless it was revenge for the beast killed by York.

The opposing forces left the river bank and vanished toward their village. The short battle was over. York watched as the Free Ones went among their dead and cut them in ribbons so that all the blood drained into the ground. The grisly business was done stoically. In the curious economy of the little patch of Earth, it served to foil any chance of the Beasts feeding on them, and it also fertilized the ground.

BACK in the village, York found the girl Leela standing among the wounded. She bravely choked back tears as she stared down at her lover's white face.

"He will live," she whispered. "But he will never walk again. He was paralyzed by a shot in the spine. Oh, Anton York, can't you help me?"

She was suddenly weeping against his shoulder. York patted her soothingly, and then set his lips.

"Do you want to take a chance?" he asked her. "A chance that he will be whole again—or die?"

"I trust you, Anton York," the girl said instantly.

He operated. Centuries before, against the day when some physical accident might try to rob him of Vera, York had studied surgical technique and become adept. With a skill that no Earthly surgeon had ever approached, he removed the bullet with a sharp knife. Antiseptic herbs that the people cultivated protected the wound. The young man passed into a restful sleep from which he would awake fully restored.

York waved aside the girl's gratitude and shook a fist up toward the peak of the dome. Within him, rage had become a tidal force. They were playing at being gods up above, the merciless dome builders, unmoved by these tragedies.

They must be out to conquer the universe, breeding the horrible hypno-beasts as their scavenging horde! And it must be stopped.

But how? York, super-scientist of Earth's Universe, would have tried. But York, scienceless orphan in a new, unknown universe, was practically helpless.

AYEAR passed. York spent most of his time with endless computations. For a blackboard he used a patch of sand and a stick. Again and again he laboriously worked out equations for the new universe's master laws, only to find, by simple tests, that they

were wrong. All the while he had the feeling of being watched. And to worry him further, what had become of Vera? Had she run out of food or air supplies? Had she been captured?

One day she seemed near him. He shrugged off the hallucination, but suddenly jumped up. It was her mental voice crying, faint and far away. York followed it like a radio beam and came to a portion of the dome wall where it was strongest.

"Vera!" he telepathed. Most of his mental vibration surged back from the wall, but some leaked through. "Vera, are you there? We're taking a chance, contacting like this." Then he became tenderly eager. "Are you all right, my darling of the ages?"

"Yes, Tony. I can see you. You look thin and haggard. I had to come. I've been distilling the planet air, and eating the pulp of the twenty-two day plants. I'm all right."

York briefly recounted his year of separation from her.

"I'm all right, too, but I have to solve the master laws of this universe."

"Tony, that's why I came. I've been working on computations, also. It came to me suddenly. Entropy, Tony— This universe has a lower entropy. Exactly one point, one-six-four. I measured it."

It struck fire in York's mind.

"That's it, Vera! Good girl. But now, go quickly before the dome people detect you. I'll work out the laws. I'll wipe out the hypno-beasts, and then break out of the dome, one way or another."

"Be careful, dear." With that, Vera's mental voice moved away.

York returned to the village, his brain buzzing. Entropy, of course! Not only slower light, slower sound and "longer" space, but also a slower entropy — slower dissipation of energy in this universe. It accounted for the relatively high potential energy in slow-burning fuels. This universe had not run down as much as Earth's Universe.

With this vital clue, York's equations began to take life. Formulas dovetailed, and the ubiquitous zero did not always crop up to mock him. In another month, he had calculated the elements of a ray weapon, freed of the clumsiness of propellant guns.

He called Robar and the Congress to session. The men looked at him a little strangely.

"What is it, Anton York?" Robar asked. "We are not sure if you are a madman or not. For a year you have spent your time hunched over a plot of sand, making marks with a stick. What have you been trying to do?"

"Discover science for you."

"Science? We do not even know the word."

YORK began at the beginning. "After the time of your forefathers, science arose on the Original World. Machines were made that do all things. Also weapons of war. Weapons, for instance, that blast things to bits. I am going to make one. I will need help and metals. Most of your rifles will have to be melted."

Robar looked dubious. "It will be danger-

ous partially to disarm ourselves. And how do we know that you are not merely a madman?"

The gods must be laughing at the irony, York thought. But he could not blame them. They knew nothing of him, or even of science. York picked up a little quartzite pebble that he saw on the floor.

"If I make this stone shine in the dark," he demanded, "will you agree?"

They nodded. York went out and returned with the radium capsule of his suit's heating coil. Radium and radioactivity were two things not greatly changed by the new universe's laws. Holding the radium point near the stone, it shone fluorecently in the dark. The councillors exclaimed in wonder. The project began.

York met and conquered what seemed insuperable difficulties in the next six months. Metals had different melting points in this universe, glass had altered properties, and electricity had new values for its ohm, ampere and volt. But at last he had a workable radium battery that shot its current through a series of interlaced coils behind a convex mirror of polished steel. The whole was mounted on a large-wheeled base.

It was heavy and clumsy, and so crudely worked that even an artisan of the late Stone Age might have laughed. But it held a giant of power.

At the final test, York clapped together the contact-handles of his switch. Electricity pulsed through the coils. A field of strain surrounded a metal bar. Its end, at the focus, became a diamond of incandescence—and atomic disintegration. An energy ray of neutrons hissed from the cathode mirror. It stabbed invisibly for a lone tree which had been picked out as the target. The tree cracked in half, its mid-portion blasted to atoms.

The villagers cried aloud in fear and wonder, and their faces plainly said, "Witchcraft!" York wondered what they would say if they knew he had once, in his own Universe, moved the planet Mercury. Yet York himself was stirred by the simple blasting of the tree. It marked the first step in his conquest of the new universe's laws of science and power. Back in his ship's lab, if he could get there, he would be in a position to wield powerful forces—defy the dome builders!

But first, the hypno-beasts. . . .

CHAPTER VII

Escape from the Dome

M-DAY reigned in the village. Every able-bodied male flocked to the banner. This was not to be a war, but a crusade against the hated Beasts. Once and for all, under this dome, they would be exterminated. As York led his two thousand grim, determined men, he had the curious thought that in any Earthly war they would be worth ten thousand other fighters. For in their breasts beat the tidal wave of hate nurtured for twenty centuries.

They crossed the river, most of them swimming, holding their rifles high. York's machine was pulled across on a raft. On the

opposite shore, in enemy territory, sentry lines retreated till reinforcement came. In a pitched battle, York's yelling men smashed through. They took prisoners wherever possible. For when the Beasts were gone, these poor mental slaves would again be free, normal humans.

The army marched on the Beast village. It was a sprawling, filthy mass of hovels, but suitably protected by a high wooden wall manned by riflemen. The approach was an open field. York's men could employ no strategy except to scatter and crawl forward from clump to clump of grass. Bullets whined, picking them off.

York gave his instructions to Darrill, Lee-la's young man, who was commander.

"Get your men as close to the wall as you can, without too much loss of life. Give me time to set up my machine and aim. Then rush in and mop up. Kill all the Beasts you can."

Darrill nodded and his men crawled forward, like the plainsmen of old stalking the wily Indian. York went over his machine's parts carefully, then aimed it for the nearest part of the city wall. He pressed the contact switch. His first blast went high, thundering harmlessly against the dome wall beyond.

His second struck. A ten-foot portion of the stockade burst into flying splinters. Two men, slaves of the Beasts, went with it as mere splinters of flesh. Again and again York knifed his switch, hurling detonations of neutrons, raking the village wall. It became a saw-edged ruin.

The village beyond was exposed to attack!

Now Robar's forces arose and charged. The Beasts, in their quasi-human cunning, rallied their slave-men to the breaches. They poured a withering fire at the attackers. York hated to do it, but he swept his super-machine-gun across the defenders' ranks. Slave-men and Beasts fell in bloody tangles.

Robar's forces reached the village, stormed in, and began mopping up. Since most of them were at least partially immune to the hypnosis, by heredity, they promised to make it short work.

York stood tensely. Why hadn't the dome builders interfered? He had half expected it. He was prepared to swing the snout of his super-gun up, if they appeared, and blast venomously at them. If they had some weapon ready at the dome's peak, and fired down, York would blast down the dome even if that meant a choking death.

IT was a grim moment, for that was York's first challenge to the dome builders. But not a sign came from the mysterious watchers.

The Beasts in the village did not accept extermination so easily, however. York had not noticed what went on at the back of the village, where a stretch of concealing forest grew to the wall edge. He was suddenly aware of danger to himself. A force of hypno-beasts and about fifty slave-men were creeping up at his side.

Alone with his machine, York was surrounded. The men, at their masters' commands, raised their rifles. A fusillade of bullets would riddle York and shatter his

machine. Whatever the outcome of the village battle, York would meet his end.

Death and Anton York stood face to face.

Was this the way in which the dome-scientists were retaliating? Were they controlling the Beasts as they controlled the slave-men, giving them the mental command to kill York?

York first darted his hand for the switch. At least he would take with him some of the enemy. A second thought clutched him. He had easily snapped, at first try, the hypnotic-power of the hypo-beast he had once met. Suppose he hurled the full power of his mentality at them now?

In his two thousand years of life, York had come to learn something of the limitless depths of power within the mind. He had at times used hypnosis himself, and telekinesis. He rang out a call now to the cosmic fed radiogens of his brain. A field of force radiated from him. His mental force met and challenged the combined mental force of the five hypo-beasts.

A strange, silent battle was being fought there. . . .

One lone man stood rigid, surrounded by five repulsive, rigid Beasts. No physical movement betrayed the fact that between them had sprung mental forces of tremendous magnitude. The slave-men cowered, mere brawling pawns in this psychic war. Whichever won, York or the Beasts, would command the slave-men to kill the other.

Perhaps a second passed, perhaps ten minutes. York felt the growing strain. Sweat ran down his face. His brain seemed to be burning alive as his immortality radiogens poured their energy into the field of mental force. He could not stand it much longer. His brain would burn out like an overloaded generator.

THE ending was curiously undramatic. One of the Beasts seemed to sigh suddenly. It toppled over, head drooping on its serpentine neck, Medusa eyes closing. It was through, burned out! Another followed, then two more.

The last held out. Its eyes locked with York's. York, reeling, called forth one more surge of mind energy.

The last beast toppled. With a snap, the spell broke.

"Shoot the Beasts," York commanded mentally.

Obediently the slave-men poured bullets into the fallen bodies. They jerked convulsively and died. York slipped to the ground, drained of energy, and fell into a state that was more a coma than sleep.

When he came to, young Darrill was splashing water in his face.

"Anton York!" he cried joyfully. "The village is ours! We killed many of the Beasts. But about half escaped, running to the woods."

York pulled himself together.

"No time to lose," he said. "Organize a Beast-hunt. String your immune ones in a wide line and drive the Beasts into the open, past my machine. Every last one must be exterminated."

It took a week. The immune men, like beaters driving wild game past hunters,

herded the panic-stricken hypno-beasts at will. Whenever they were in the open, York's neutron gun blasted into their numbers, ripping them to quivering shreds. It was not till Robar's men had roamed for twenty-four hours without finding a Beast that York nodded in satisfaction.

"There is not a single Beast left in this ten-mile patch of Earth," he announced.

But at the same moment, a lumbering form charged from a patch of bushes. It was the last of the Beasts. It seemed berserk, coming forward against a thousand rifles and the blasting-gun.

"Wait!" York yelled, as the men took aim with their guns. "Surround him. Bring him here alive."

A dozen men dragged the struggling, bleating creature before York. Hiding his loathing at its blubbery, oily body and snake-like head, York addressed it by telepathy.

"Can you understand me?" he queried. "Will you answer my questions?"

"I understand you," came back clearly from the hypno-beast, confirming York's belief in their semi-intelligence. "I will answer questions only if you promise me speedy death. I do not wish to live here, the last of my kind."

YORK agreed. "Tell me this. Do you know why you are here, under a dome, pitted against Earth people?"

"No."

"You don't know why your kind have been put here, in hundreds of domes, pitted against hundreds of life forms?"

"I did not know of the other domes." The creature was obviously startled. "I wonder—" His thoughts trailed to nothingness.

"What is your native world?"

"The planet system of another sun, according to a legend of ours. I was born here, of course. A long time ago, our progenitors were brought here to this dome."

"And you have no idea why?"

"None. Now give me death."

York gave the signal and a fusillade of bullets snuffed out the life of the last hypno-beast under that dome. York looked up. Were the dome builders staring down, watching in mockery? His hatred and loathing of the Beasts swiftly transferred to them. Why hadn't they interfered? It must be against their plans to have the hypno-beasts wiped out under any one dome.

The maddening enigma of it grated York's nerves. Was he a pawn in their hands? Or would he have the chance yet to do something, before they were quite aware of who he was and what he planned? If he could only get to his ship!

York worked rapidly. He altered the adjustments of his machine so it would radiate sheer energy. The scientific laws of this universe were no longer a mystery to him. He had the machine dragged to one part of the dome wall, and donned his space-suit. Its oxygen unit still held a trickle of the life-giving gas.

He faced the people he had freed of an age-long menace.

"I am leaving the dome. But I will be back soon, to free you and return you to

Earth. I swear it."

He stepped through a patch of the energy wall, neutralized by his machine's counter-energy. Like a god he vanished from their sight, as he had so often from the people back on Earth.

BEYOND the dome wall, he crouched for a moment, quietly, warily. Would the dome builders pounce on him now, like a cat on a mouse? But nothing happened.

York left the dome, treading through a pulpy jungle. The Cepheid luminary was just at its periodic maximum, shining as a blue-hot sun. The outer coating of York's suit, a product of his advanced science, threw off waves of blistering heat.

He reached the ship, not daring to call Vera mentally before that moment. He jerked the lever of the air-lock and rushed in.

"Vera!" he called vocally. "I'm back. Vera—"

There was no answering sound in the cabin. York ran through the storerooms and laboratory before he knew the truth. Vera was not there! At first he felt almost physically sick. Then York's nerves eased. Perhaps she had merely stepped out to gather pulp food. Guardedly he sent out a mental call, extending its range slowly in a widening circle about the ship. When no answer came, he recklessly swept a circle a hundred miles around.

Still there was no answer. Vera could not possibly be within range without answering—if she were alive.

York's eyes went bleak. There was only one answer. The dome builders had discovered the ship and captured Vera!

The icy rage that swept through York's veins at that moment would have made any of his past enemies—the fifty Immortals, Mason Chard, the Three Eternals—tremble in stark fear. No savage Stone Age man, losing his mate of a few years, could match the blazing agony that seared within York. Vera had been his love, his constant companion, for two thousand years.

York made a vow, in a cold, deadly voice.

"No matter what or who you are, dome builders, I'll search you out. And if you've touched a hair of her head—"

He could find no threat that was adequate.

CHAPTER VIII

The Aliens Appear

ANTON YORK labored for a month. He feared detection at any moment. Why didn't the dome builders come back for him? Why hadn't the ship been guarded? The sheer strangeness of it utterly baffled him. Vera, of course, would never betray him. But by adding two and two, they must know of York. Were they so all-powerful that they feared nothing?

In that month, York accomplished miracles. He worked at his gravity engine, a protective screen against weapons, and his own weapons. Before, the ship had landed almost a derelict. Now it was again a floating fortress of might, as it had been in his own Universe.

It was not miraculous. It was simply that York had finally solved the new universe's master laws. It took only minor adjustments to fit his instruments and energy coils to work under those new principles. And by virtue of lower entropy—higher available energy—York's ship was now a more formidable fighting craft than it had been in Earth's Universe.

Seated at his controls, he raised the ship one day. Lightly as a feather it darted up. His energy coils drew power from the planet's gravity field, like a sponge sucking up water. As a test, he shot into space and rammed his ship forward at the speed of light. He braked with his inertialess field to zero in three seconds, without feeling the slightest jar. The engines hummed smoothly, like a snoring giant.

As a test of his protective screen, he chased down a meteor and cracked it into it at twice the speed of light. His screen shattered the huge stone instantaneously. His hull was untouched.

He chased down another meteor and turned his gamma-sonic weapon on it. The livid beam whiffed fifty millions tons of matter away in twenty-five seconds. He was amazed himself. In his own Universe, where lower energies reigned, it would have taken at least twice that time.

Satisfied, he dropped back to the planet, hovering over the domes. He saw their full extent now. There were more than a thousand in all, occupying a good portion of the otherwise barren wastes.

York drew a deep breath. He felt better now, better than he had for the three years he had been in this universe. He was no longer a marooned, helpless being. At his fingertips again was super-power.

HE pondered. What was he to do? How could he find the dome builders? And Vera? They seemed bent on ignoring him. He speculated the thought of searching the other twelve planets of the Cepheid sun. This one seemed to be merely an experiment station. Find their center and confront them—

York smiled suddenly. He had a better idea. Ignore him, would they? His hands moved to the controls. His little globular ship dropped toward a dome. York sprayed down energy neutralizing force and his ship dropped through the dome wall into its interior. The wall reformed back of him. He was within. This was the very first dome he had seen, with its pathetic ape-race dominated by the hypno-beasts.

To the denizens of the dome, it must have seemed like the visitation of a god. The globular ship darted around like an angry wasp. Whenever a hypno-beast appeared, a ray stabbed down, and a puff of black soot replaced the Beast. In an hour, York had cleared the dome of every lurking hypno-beast. At the last, he hung over a crude village of the cowering, trembling ape-people, hurling down a mental message.

"You are free of your enemies! You will be returned to your home world eventually. I, Anton York, say it!"

This last was a challenge to the dome builders. From dome to dome York went.

He freed the snowbird people of their hypno-beasts, and the silicon-men, telling both that they would be returned to their home worlds. Then he rocketed to other domes, raying down the hypno-beasts relentlessly. Intelligent they might be, and as deserving of their own existence as any other race. But their connection with the dome builders branded them, in York's mind, as initinal, only deserving extinction.

Dome after dome, and the hunt sang through York's veins lustily. This was the sport of the gods! But suddenly the cold shock of reason doused his mind. Another ship appeared before his, going from one dome to another.

Instantly York became cold, wary.

The dome builders had finally answered the attack he had made against their domes. He put his protective screen up to full power. No matter what weapons they had, he knew his screen would stand at least a few minutes of battering. He could flee, as a last resort, if his own weapon failed. Out in space he knew a hundred tricks for eluding pursuers. There was no immediate danger.

He had tensed himself for attack, but it did not come. Instead, from the lone ship, came the clarion voice of telepathy.

"You are Anton York, of Earth?"

"Yes. You have my wife, Vera, in captivity. My first demand is that you release her. Secondly, your dome experiment, whatever it is, must be stopped. The various races must be returned to their own worlds."

THE psychic voice that came back seemed to be laughing.

"Indeed! You have appointed yourself champion of the universe, Anton York?"

"Call it what you want," York shot back. "I only know that those races are suffering. They have been for too long under the dominance of the hypno-beasts. The Beasts must be destroyed to the last one."

The other being seemed to stop laughing and became very sober.

"Exactly. And now we have found the way."

Startled, York almost bit his tongue.

"You mean you have wanted the Beasts destroyed? Your long, elaborate experiment is for that end? But why—"

It was all confusion, suddenly.

"I will explain all. Come with me to our main world, the fifth planet."

"Wait! If this is trickery, I have a powerful weapon."

As answer, a tongue of queer green light suddenly sprang from the alien ship. It licked greedily around York's ship. His electro-screen melted away as though it were cotton. The tip of the green tongue flicked against the hull and gouged out a chunk of meteor-hard metal, with the ease of a whip flicking off a patch of human hide.

York felt it as a tremendous shock that jarred through every inch of the ship, as if a mountain had been hurled down on him. He gasped. His screen, against which great meteors at the speed of light would have cracked to powder, had been pierced as easily by the green ray as a knife going through butter.

Illimitable power! Gigantic might! These the alien must have.

York had to know the full bitter truth. He tripped the lever of his great gamma-sonic weapon, training it dead-center on the other ship. The blast that emerged would have bored a hole ten miles deep in solid steel. It crashed against the alien's screen, threw up a shower of sparks—and dissipated. It dissipated like vagrant smoke. York was helpless.

"You see?" came from the alien. "We are supreme scientists. Your puny screen would go down in an instant, if I used any amount of power. But your death is not wished. Up to now we've patrolled space against possible expeditions from any planet. But we no longer have to. Follow me."

YORK followed. They arose from the planet of domes and arrowed toward the Cepheid sun. Within an hour, at the speed of light they had neared the fifth planet. It was strangely like Earth, blue and cloud-wreathed. But only under the waning rays of the variable sun. Under its maximum rays, it must change to a hell-hot purgatory, ten times more trying to life than the fierce humidity of Venus.

"You live under domes, on your planet?" York queried, before they landed.

"No," came back promptly, politely. "We live in the open. Our whole evolution has been adjusted to the periodic change. We live in frigidity during the wane, and in superheat when our sun waxes, and it is all the same to us. It is the keynote, Anton York, of the story I will soon have to tell."

York's ship landed, after the alien's, in a wide field surrounded by a gleaming city that took his breath away. York had seen countless civilizations, but none so manifestly magnificent as this. He was aware of various subtle impressions. First, a vague air of sadness hung over the city. But it was an air of sadness that was lifting, like mist under a bright sun.

Also, he noticed several ships, in the huge spaceport, hovering as though awaiting their arrival. They dipped. York was not sure, but the ships seemed to be saluting him! The burning mystery of it all piled pyramid high in York's seething mind. In some way, York, or something he represented, was a hero to these people.

He stepped out in his space-suit, all thought of personal danger gone. The being from the other ship was like the one he had seen once before—thin, spindly, large-headed. His resplendent dress, of fine-spun metallic cloth, suggested high rank. By the deference of his crew and the others around, he must be of the highest rank.

"Yes, I am Vuldane," the being returned, catching York's thought. "King of our race, the Karians. Follow me to my palace. Your wife, Vera, is there."

York stepped eventually into a huge, glittering chamber. He saw only one thing, however. Vera stood in a space-suit ahead.

HE crushed her in his arms. He couldn't say or telepath a word, at finding her safe.

"Tony, dear," she said. "I worried for

you. But I knew you would be brought here safely."

She was amazingly calm. And behind her calmness was an odd, puzzled look. York looked around carefully. Suddenly he grasped her wrist. With his other hand he jerked a weapon from his belt, a smaller edition of his gamma-sonic force. He pointed it at Vuldane's unprotected chest.

"Vuldane," he snapped mentally. "I came here only to find my wife. Now, unless you want to die, command free departure for us from this planet. I'll talk with you in space, later, if you come in an unarmed ship. I'll give you three seconds."

The king stood rooted in surprise, though not fear. York counted three, then began to squeeze the trigger. But something knocked the gun down. It was Vera herself.

"Tony—no! It would do no good. They would hound you down. You must listen to their story first. And when it's done, you will wonder yourself what is right and what is wrong."

York holstered his gun. It had been a mad thing to do. But the past adventures, and the staggering mystery of it, had unbearably tortured his nerves. He whirled on the king, who seemed unperturbed.

"Tell me the story quickly. You are planning to conquer the universe?"

"No. We are too civilized for such paltry ambitions."

"All right. But you are propagating the hypno-beasts for some malign purpose. Revenge on another race?"

"No. We want the hypno-beasts killed as I told you. Every last one, if possible."

"But why then the bell jar experiment? There is some threat to my world. I feel it. You want Earth?"

"No. We do not wish your world, Earth!"

"Talk sense!" York groaned.

"Tony, don't ask wild questions and interrupt," Vera admonished. "Let him tell his story. Just listen."

CHAPTER IX

Tale of Doom

VULDANE nodded. "You would not have harmed me with your gun, by the way. This room is in an energyless field. No weapon works in it. Now listen. This is the story of our race—and our doom!

"We evolved to intelligence a million of your years ago. Vera and I have compared notes. We did not evolve under this sun, but under the rays of another Cepheid variable, at almost the other end of this universe. We lived there industriously and happily for a hundred thousand years. Then our astronomers announced that the sun was due soon to explode into a nova, killing all life on its planets. Cepheids are unstable stars."

"We had to migrate. But we had to find another Cepheid. And to make it difficult, we had to find a Cepheid with the exact period of waxing and waning that our original sun had—twenty-two days. Our biology, our metabolism, our very life-spark, is adjusted to that pulse beat, as yours is adjusted to a uniform condition."

"I think I understand," York said. By

analogy, on Earth, our most vigorous peoples are in the temperate zones, experiencing alternate winter and summer. Our tropical people are backward, and so are our Arctic people. We are adjusted to that variable pulse of life, though to you it would seem absolutely uniform. You, of course, are adjusted to a change from bitter cold to great heat, either of which would kill us."

"Clearly put," acknowledged Vuldane. "We found, after much searching, such a variable, and migrated to its planets. We set up our civilization and had another period of well being. Then that Cepheid reached the explosion point. Again we had to search for a twenty-two day Cepheid—one with planets, which are rare—and migrate to it. We have migrated a dozen times in the past million years, Anton York. We are nomads of the cosmos, never knowing a true home!"

York felt the aura of sadness that suddenly radiated from the alien being. Certainly they were to be pitied for having been cursed to live under a temperamental star like a Cepheid, instead of a long-burning, stable sun, like Sol.

"We have been in this Cepheid system fifty thousand years," Vuldane resumed. "Two thousand years ago our astronomers again gave out their sickening omen. This sun would soon explode. Again the packing up, the elimination of all but a comparative few to start the race over, the departure from loved homes, deserted cities, the trials of rebuilding a new civilization. That faces us again."

"But why not migrate to a stable star and live under domes?" York objected. "You can duplicate any environment, as in the experiment domes. Surely you can duplicate your own."

"Live under domes?" The alien shook his head. "It would stultify the race, wither it away. It is not a good life. Would your Earth people like it?"

YORK thought back to Earth's colonization of the other planets. It was a tough existence. Young people aged rapidly. If Earth were to vanish, the remaining Earth race on other planets, in their sealed habitations, would die off through sheer strangulation.

"No, we must migrate to our type of sun," Vuldane stated. His thought-voice changed. "But this crisis is sharper than all others have been in the past. We have combed our universe from end to end. Only one twenty-two day Cepheid is left, with a family of planets. The Cepheids of adjacent universes, like yours, are out of the question, for your astral laws are different. Our race would wither away as slowly but surely, in an alien universe, as under domes. We do not wish it. Thus that last Cepheid is our remaining hope. That is the last world possible for us! And now I come to that which affects your people—and the hypno-beasts."

He eyed York a moment, as though reluctant to go on.

"That Cepheid has a family of ten planets, all inhabited by the hypno-beasts. Somehow their evolution inhibited them and they never became scientific. But they were en-

dowed with the remarkable power of hypnotism. A kind of hypnotism to which our minds are peculiarly vulnerable. So strong did it seem that we doubted whether any minds could stand against it. But we had to find out.

"Thus we roamed our universe—and yours and others—and transplanted bits of inhabited worlds under the domes. We pitted them against the hypno-beasts. Our sole purpose was to find a race that could learn how to fight the Beasts, while using this universe's scientific laws."

The pieces all clicked into place abruptly, in York's mind, with a stunning impact.

"I see," he murmured. "A colossal search for a race of creatures *parasitic* to the hypno-beasts! A race able to resist the hypnotism and *conquer* the Beasts!"

"In broad detail, just that," agreed Vuldane. "But for a long time we despaired of results. Most races succumbed to the hypnosis and became slaves of the hypno-beasts within a century or so. These we cast out as abortive cultures and procured new ones. In all, in the period of our long-range experiment, we have tried out more than ten thousand races, culled from seven universes!"

The staggering sweep of it overwhelmed York. Vera looked at him sympathetically. She had got over the first shock long before.

York looked at Vuldane, king of a driven, nomad race, in a new light. He and his people had the indomitable courage and never-say-die spirit that could only be admired in any race. York's thoughts leaped ahead.

"Earth people," he whispered. "Earth people are the ones!"

VULDANE nodded, and somehow there was infinite regret in his manner.

"Yes, so it has proved. As with the many other races, we installed a thousand of your race in a dome, and pitted them against a control group of the hypno-beasts. One other remarkable, or damnable, attribute the hypno-beasts have. They are almost infinitely adaptable to any environment. They do not breathe oxygen. They absorb life energy from blood, any blood, and no extremes of temperature can stop them.

"We watched your race with avid interest for those two thousand years. We could not leap to conclusions. We used the true scientific method of thorough waiting. We watched as generation by generation your people developed immunity to the hypnotism. At the time you arrived, we had just about decided they were the ones. More, your rapid killing off of the hypno-beasts convinced us completely. Another race has developed immunity, but they do not have the scientific capabilities of yours."

York knew he was grinning in a ghastly, mirthless way.

"You mean," he gasped, "that my coming decided you on my race, rather than the other? But I'm a special case. I'm an immortal among our race, and a super-scientist only because of that. You are overestimating—"

Vuldane smiled. "I cannot blame you for pleading in that way, trying to throw us off our decision. We know you are a special case. But you are still a sample of your

race. The important thing is your race's capacity for science. We will furnish all the science necessary to destroy the hypno-beasts."

York pondered.

"You are supreme scientists. Why not simply ray down the beasts, with long-range beams from space, on their planets?"

"Do you think we haven't tried everything possible?" responded the alien. "We did that long ago. We rayed down all their centers and cities. We tried to cover every square inch of their planets. When we thought we had reduced their numbers to a safe minimum, we built fortresses. The inevitable happened. The Beasts rebred rapidly. They surrounded the fortresses in massed numbers, throwing their combined hypnosis within. Our people fell under the spell, were killed. The Beasts reigned again.

"You do not realize, Anton York, the tremendous power of their hypnosis in quantity. No minds in the universe can withstand it, except two. Those of your race and the non-scientific race."

"No diseases sowed among them could kill them off?" York queried. "No insect plagues them? Often it's the little things that conquer the big."

AGAIN he got a withering smile. "Before we used cultures of races, we gathered cultures of germs, worms, insects, crustaceans, plants. More than a million varieties of them. We sowed them among their planets. The hypno-beasts survived everything—everything. They are perhaps the most tenacious form of life in all the universe. Don't forget we have been trying for twenty centuries. No, Anton York, only intelligence, immune to their hypnotism, will ever wipe them out."

York shrugged. "I must admit a certain degree of sympathy in your problem. I appoint myself emissary to my world, to tell them of your need for help. How many Earth people do you think you need?"

York saw the stricken look in Vera's eyes and prepared to hear a gigantic number.

"All of your people!" responded Vuldane softly.

York was past shock. He could only stare, as if turned to stone.

"All of your people," repeated the alien. "It will not be a simple task, even with Earth people immunity, and our science given to them. The time is short now, before our sun explodes. We must move all your people to the Beasts' planets, setting them up in fortresses which we will build. Many, perhaps most, of your people will succumb at first, till the following generations develop immunity. Finally they will wax strong, sweep out and conquer the Beasts completely. Then we will sow some disease among your people to kill them, and our new home will be ready for our occupancy."

York's psychic voice was a deadly hiss.

"By what right do you consider it your privilege to destroy my race to save yours?"

"By what right?" returned Vuldane, "do you consider your race more worthy of continuation than mine? We were civilized long before yours. If you think we are merciless in sacrificing an alien race for our

benefit, what of your own race? To this day it fights among itself at times. We haven't had internecine war for half a million years. Tell me, Anton York. Outside of your own personal prejudice, who is to judge whether we are wrong or right, except as necessity drives us?"

York could think of no answer. He knew now what Vera had meant before. It was the old story of Cro-magnon man killing off Neanderthal. White men destroying the redmen of America. Earth people expanding into interplanetary space and the flower people of Ganymede dying out. On a grander scale, this was the same thing. A vigorous, highly civilized, powerful race was grimly holding onto its place in the sun. Could they be blamed?

YORK answered at last. "No. There is no question of right or wrong in any scale of cosmic morals. But here is one thought, Vuldane. My people have millions of years ahead of them. Their sun is stable. You, on the other hand, are a doomed race. You will live another hundred thousand years in your new system, and then again that Cepheid will explode. Is it worth murdering my race, facing a million-year future, to save yours for one-tenth that? Can you pass into your inevitable oblivion with that on your conscience?"

"A strong point," nodded Vuldane. "Except for one thing. Our astronomers have measured all the stars. A new Cepheid is being born in a certain star group. It is beginning to pulse slowly. In the slow time-scale of the cosmos, it will not be a full-fledged Cepheid for another hundred thousand years. But if we gain our new breathing spell, as outlined, that Cepheid will be ready for us. And other Cepheids are being born, our astronomers note. Through them, we also have a limitless future ahead of us!"

York deflated utterly. He could already picture, in his mind's eye, the nine planets of his sun, barren and deserted—human life gone. He looked up suddenly.

"All, you say, Vuldane. But there are more than ten billion of my race. Surely you can leave a few thousand behind, to breed our race again."

Vuldane shook his head, with a combination of pity and ruthlessness.

"No. We dare not leave any of your race. Once they grew strong again, we would only have to destroy them later. Better that your race goes into total oblivion now."

York could see that point, too. Knowing the crusade spirit of his own people, they would one day swoop down on the Karians, to right an old wrong. There would only be bitter interstellar war. The Karians, for their own sake, would have to guard against that.

AND again it was not a question of right or wrong, or cruelty, or anything in normal terms. This was something above and beyond such meaningless phrases out of Earth's old law books.

"How much time is there?" he asked dully. "How soon before your Cepheid explodes into a nova?"

"Just a short thousand years. It will take

all that time to bring your people, set them up in fortresses, and help them battle the Beasts. And for us to migrate, when that is done. The time is short."

York drew himself up.

"Only one thing I ask, Vuldane."

"Yes?"

"Before you begin taking my people, give me a certain time to try to figure out some alternative."

Vuldane pondered. "The transference should begin immediately. However, it will take a year to complete our first fleet of ships capable of plunging through the space-time wall that separates our two universes. I give you that year, Anton York."

Suddenly he thrust out his spindly hand.

"And good luck!"

CHAPTER X

Conquest of Mind

YORK'S ship sped through the void at a pace that left laggard light far behind. His face was grimly set as he took a course for the planetary system of the hypno-beasts. Vuldane had readily given the data.

"A year, Vera," York said desolately. "A short year in which to save the human race! I must not sleep for that year. Drugs will keep me going. Somehow there must be a way."

"What do you except to do among the Beasts?" Vera asked tonelessly.

"Anything," York stated. "Anything possible."

In a day they were there. The Cepheid sun was an exact duplicate of the one they had left. Its ten planets were large and widespread, fairly crawling with the hateful hypno-beasts. They had a semi-civilization. They bred whole races of creatures for their blood-food, for their ten planets of loathsome vampirism. Luckily they had no space ships. The whole universe—this and all others—would become theirs. They populated the ten planets simply through the accident of separate, parallel development.

York could feel the powerful beat of their hypnotic force radiating en masse from them. It dragged at his mind as gravity dragged at his ship. Recklessly he power-dived over one planet, spraying down his gamma-sonic rays, cutting a wide swath among them. The hypno-force clutched at him. Twice more he dived recklessly, and barely won free the third time.

"Tony, please! It's senseless."

York nodded helplessly.

"I need a long-range projector. We'll build one. No. We'll have the Karians build us one."

The ship sped back the way it had come. Vuldane readily agreed. Almost overnight his technicians turned out a super-projector for York's ship and back he raced. With this he whipped his ship in a tight orbit around one planet and sprayed down the destroying rays in a band ten miles wide, from directly above the surface.

"If this works, Vera," he said in vague hope, "we'll have a million more made. And I'll go to Earth and get a million strong-minded men, and we'll sweep every planet

clean. The Karians weren't able to get close enough to the planet."

But gradually he felt the finger of hypnotic force reach for him. His telescope revealed thousands of the massed hypno-beasts below, directing a combined hypno-ray upward at him. He kept up his deadly beam even when he felt the cloying, insidious urge to drop down and yield to the Beasts. Sweat beaded his brow. God, what frightful mental power they had!

He had not watched Vera. Suddenly he noticed her at the locked controls, unhitching them and plunging the ship down. Her movements were jerky, robotlike. She was in a hypnotized trance.

"Vera!"

York left his gun and leaped for her. She turned on him, clawing and scratching. York bit his lip and swung his fist, knocking her cold. He zoomed the ship up, barely in time. His whole body had begun stiffening at the powerful clutch of massed hypnotism from below. He whipped the ship into free space.

"Vera, forgive me," he muttered when he brought her to with a dash of cold water. "Well, that's out. The men from Earth would have as little, or less chance than I had."

"Vuldane said they tried everything," Vera murmured hopelessly. "Theirs is the only way. Setting Earth people down there, after blasting a space with their super-science. Letting them breed and produce immune generations. A thousand-year job, Tony—and we have only a year. It might as well be done."

York did not give up. He thought next of a screen against the hypnotic force. Back at the Korian world, he consulted with Vuldane.

"There is no screen against their hypnosis," Vuldane stated flatly. "We have tried. You noticed that your mental telepathy barely worked through our energy wall. Yet that energy wall is absolutely transparent to their hypnotic force!"

"Still, I want to try," ground out York desperately. "I must. Give me one dome as a proving ground, and all the materials I need."

"Agreed," nodded Vuldane quickly. "I sympathize with you, York. But I have no hope for you."

York tried everything in the next few months. He had a group of chained hypno-beasts as control, and set before them shields of various composition. Metal alloys, plastics, radium-coated diamond, and then more subtle walls of electro-magnetic energy, cosmic rays, even a vacuum. In each case, stationing himself with the shield between, their hypnotic force came through undiminished.

Vuldane was right. There was no shield to that demoniac mental vibration.

"Tony, please, you must rest," Vera insisted as he staggered and would have fallen except for her arm. "You haven't closed your eyes in months."

But York went on, sleepless, taxing the superb vitality of his immortal body to the utmost.

"There must be a way," he chanted steadily.

ily, as though he were a child reciting a poem.

Vuldane came to visit him at times, and even made suggestions. Admiration for York shone from his alien eyes.

"If anything at all can make me feel a pang of regret over sacrificing your race, it is you, Anton York. A race that produces such as you deserves continuation." Then, in the next breath he added: "But my race must continue!"

"Vuldane, did you try everything?" York pleaded. "Did you try creating planetary earthquakes, floods, volcanic eruptions?"

The Korian nodded. "Naturally. We nearly disrupted one planet entirely, instituting a planet-wide geological upheaval. For a century the planet seemed clear. Not one hypno-beast appeared. Then suddenly they cropped up again from somewhere." "An atomic fire, sweeping the whole planet's surface?" cried York. "How about that?"

"And how would you stop the atomic fire from eating inward, consuming the entire planet to ash?" "The hypnosis itself," sighed York. "That's the angle I must work from. We can't resist it or shield it. But how about a neutralizing projector?"

Fired with the new idea, York built what was essentially a scrambler, or a device that would spray out static to the hypnotic force. He was able to cast a field around his dozen control beasts and break up their flow of hypnosis into intermittent flashes. Borrowing a super-powerful generator from the Karians, York raced to the other Cepheid.

With the static machine going full blast, he was able to land on one planet. Hypno-beasts began crowding around this invasion of their world.

York sprayed his static around, neutralizing their hypno-force. Then he swept his gun in a circle, whiffing out the monsters like a row of lighted candles.

It was as though he had touched off a hidden spring. A signal must have gone around the planet. Over the horizon marched incredible droves of them. They massed around the ship in such numbers that York's lethal ray was like a little machine-gun against all the armies of Alexander, Caesar and Napoleon combined. Sheer weight of numbers would win out.

"Tony, they're getting nearer—"

"Yes, but if we had a million scramblers and a million guns, it would work!" York shouted happily. "Simple mathematics."

And then it happened. With a tortured grind, the static machine sputtered and died. Like a tidal wave, the full force of hypnotism struck them, no longer scrambled. Vera passed instantly into a trance. York, with an effort of will that seemed to tear his brain up by the roots, jerked over the engine lever. The ship darted upward at a pace that took them out of the hypnotic range in seconds.

"Just in time," York muttered. He looked over his static machine thoughtfully, incredulously. "It was a fused mass! When they were back, Vuldane explained.

"We tried that too. The hypno-beasts are canny. Their technique is simple. They pour a massed hypno-force at the scrambler, overload it, and burn it out. We tried generators with world-moving power. They

burned them all out. When will you begin to realize, Anton York, that this is a thousand-year job? We've planned it as such. It is not something that you can toss off overnight."

York looked stricken.

"I'm sorry," said Vuldane simple and sincerely, before leaving.

York looked at Vera. Not a shred of hope remained.

"Think of it, Vera," he said hollowly. "Our race was doomed as far back as the nineteenth century, when the Karians came to take an Earth culture back with them. Even before you and I were born, our people were doomed unknowingly. I destroyed fifty Immortals, and Mason Chard, and fought the Three Eternals, to save civilization. I was even ready to sacrifice myself. And all the time, another race in another universe had put their finger on us and marked us for oblivion. Our whole life and effort, all my superscience and guidance of Earth, has been a mockery, a cosmic joke, a jest of the gods."

Vera soothed him in ways she had learned through two thousand years of association. His weary head sought refuge in her lap. His bloodshot eyes closed for the first time in six months.

"All mockery," he said bitterly. "I've had the thought of going back to Earth and destroying it, so that oblivion for them will be quicker and more merciful. Lighting an atomic fire on all the planets— It would be swift."

"No, Tony. That would be pure spite against the Karians. Whatever they've been forced to do, they are a highly civilized, deserving race."

"Fire!" York jerked erect, repeating his own word. A dawning look came over his face. "Fighting fire with fire! Vera, maybe that's the answer. Instead of fighting them with our weapons, why not fight them with theirs?"

Sleep forgotten, hope reborn, York became twice the dynamo of activity he had been before.

"Time is short—six months. I have to measure the wave-length of the hypno-force, and then duplicate it."

Six months. Six months in which York explored the psycho-magnetic scale. Earth's scientists had taken two centuries to piece out the electro-magnetic scale. York condensed the same amount of research into a six-month snap of the fingers.

In the electro-magnetic scale were the octaves of radio waves, infra-red, visible light, ultra-violet, X-rays, gamma rays and cosmic rays.

In the psycho-magnetic range, York found the octaves of telepathy, clairvoyance, sixth-sense, hunch, hallucination, dreams. Far down the scale, like the elusive cosmic rays, he found the hypnotic range.

These super-penetrative radiations of hypnotism he measured with all the accuracy of an astro-physicist studying a spectrograph. They were so incredibly fine that York hazily understood them to slip through the interstices of the ether itself, as cosmic rays slipped through the planetary atoms.

"Now I know exactly what the hypno-

force is," York stated. "Vuldane, did you measure them? Try to build a projector?"

For the first time, Vuldane shook his head.

"This is a great achievement, York. But I'm afraid you can't build a projector. Not a mechanical one. Evolution produced the projector—an organic brain—after millions of years. You won't duplicate that in the time left, even the full thousand years."

York saw the logic of it. Then a strange look came into his eye.

"No. But I already have the projector." He tapped his own forehead. "All I have to do is find the way to increase its powers to equal the brain projectors of the hypno-beasts!"

"Good luck," said Vuldane again.

His sympathetic smile, as he left, told of no hope for the outcome.

Precious time slipped by.

York worked entirely from the biological angle. With a super X-ray, he went minutely over the brain of one of the captive hypno-beasts, studying its cells. What prin-

burned with hope and dread. Vera went into a coma. Her skin became cold. Her heart stopped. York stood quietly, fighting for control.

An hour later, death drew back. Vera's super-vitality rallied and life returned. She sat up, smiling. York said nothing. Words meant nothing now. Silently he led her to the test chamber, before a group of starved hypno-beasts. He locked her in. They surrounded her, eyeing her and closing in. Vera went rigid. Their eager tentacles stretched for her soft white neck.

York turned away, shuddering. Failure, after all!

Suddenly, within the chamber, the situation changed. As though an invisible blast had blown them back, the hypno-beasts fell away from Vera.

She stood up, her eyes blazing. One by one the Beasts rolled over and went rigid, in complete hypnosis.

Vuldane, when they faced him, was skeptical.

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ciple in them allowed the host to pour limitless energy into producing hypnotic-rays? When he found it and analyzed it, his face was grave.

"It's a strange new hormone," he told Vera. "Introduced into any other brain, it will give that brain super-hypnotism or kill it! I must have an experimental guinea-pig with an intelligent brain. And how much time is there?"

"None, Tony," Vera answered softly. "The first fleet already left for Earth. Vuldane came and told me last week, leaving me to tell you. But, Tony—" She touched his hand. "There is still a chance. And I'm your guinea pig!"

York looked at her for a long moment.

"You are willing, Vera, for the sake of humanity? Success or—death?"

She nodded firmly.

York distilled a few drops of the new hormone. It would either do what he hoped, or kill. He injected at the base of Vera's brain. Then he watched, with eyes that

"I can't do anything about it, York. I can't recall the ships sent to bring the first of your people. We have little time as it is to start our grand plan. I can't take a chance on your hypothetical anti-hypnosis hormone."

"Make this test," York demanded. "Send a shipful of your men to the Beast system, after they have been given my hormone injection. Command them to land among the thickest of the Beast communities and stay for ten hours. If they don't come back, I won't be able to fight your plan."

Vuldane agreed. York injected the men, rescuing them from the deathlike effects by heroic doses of drugs. The ship left.

Waiting for its return was a refinement of torture that ground York's nerves to shreds. Ten hours stumbled by like his entire lifetime.

"Tony—look!"

The ship appeared. The Korians leaped out, eagerly telling their story of withstanding mass hypnotism for ten hours, and hyp-

notizing a ring of Beasts in turn.

Vuldane turned to York.

"You have saved your people, Anton York. It is a monumental achievement. I will recall the first fleet immediately. All the culture races will be returned to their worlds. I cannot express my joy and relief that we are not forced to sacrifice your race. You may go back to your people now, and tell them they are saved."

York shook his head. A strange look rested in his eyes, for this was the strangest thing of all the past episode.

"No. It is a story they would hardly believe. The only evidence for it would be the vanishment of a thousand people from Fort Mojave in eighteen-eighty-eight. That tri-

fing event has long been forgotten and most likely unrecorded. Humanity was saved, without knowing it was doomed. That will have to remain my secret."

Vera nodded. It was a chapter of the mythology of Anton York that would never be written for the eyes of the Earth. It was the secret of Anton York.

Epilogue

Back on Earth, before the two colossi of diamond on Mount Everest, the yearly commemoration ceremony paeaned to its sad denouement.

"Anton York, benefactor of humanity, is dead!"



HEADLINERS IN THE NEXT ISSUE

MIIGHTY space armadas will one day patrol Earth's interplanetary lanes. These giant fleets will be manned by the most seasoned space warriors Earth can muster. Yet all of these fighting men cannot be transformed into veteran, experienced space-battlers overnight. They will have to be trained—in the **WEST POINT OF TOMORROW**!

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You'll give Arthur J. Burks a space-gun salute for his unforgettable story of the Planet Patrol, of brave young men guarding Earth from the perils of the outer worlds. You'll find **WEST POINT OF TOMORROW** featured in the special scientifiction section of the September **THRILLING WONDER STORIES**—illustrated by Paul!

* * * * *

CAN single-handed scientific strategy overthrow a vicious dictatorship? Not on Earth, so far. But it can be done on Mars, and Frederic Arnold Kummer, Jr., tells you about it in **THE TYRANT OF MARS**, a gripping novelet of a world in bondage. Published complete in the next issue.

* * * * *

PETE MANX is back again—by popular command. Shakespeare goes to town when Pete Manx travels from bard to verse and proves that where there's a Will there's a play. Kelvin Kent relates the saga of Pete Manx, year-leaper, in **THE COMEDY OF ERAS**. Kent's merriest maddrapper to date!

* * * * *

YOU don't have to own a microscope to see microbes! You can meet them large as life in Max C. Sheridan's novelet of microbe menace, **FORMULA FOR LIFE**, also slated for appearance in our next number. It's a remarkable story of micro-organisms turning the tables on man!

* * * * *

SCAR J. FRIEND'S story of science visiting the World's Fair, **THE STOLEN SPECTRUM**, is another story in the next issue. It's a fascinating tale of the strangest show on Earth—a show that came from another world!

* * * * *

THER five-star fantasy fiction, features and fact by favorites in the September issue of **THRILLING WONDER STORIES**. And look forward to another parade of scientifiction's greatest assembly of exclusive features—**IF**, **SCIENTIFACTS**, **SCIENCE QUIZ**, **STORY BEHIND THE STORY**, **LOOKING FORWARD**, **SCIENCE QUESTIONS AND ANSWERS**, and others.



Science Questions and Answers



CAN ANIMALS TALK?

Here's an S.O.S. for some information. Can animals talk? How do the higher mammals—apes, monkeys, and chimpanzees, communicate with each other? Have scientists taken the trouble to study this subject?—S. N., New York City, N. Y.

This is a very interesting question you voice, one that we have never yet discussed in this magazine. First, however, we must distinguish between speech between mammals, and mere vocalization. Perhaps the most famous expert on this subject was Garner. He was a firm believer in monkey language and suggested that the capuchins (*Cebus capucinus*), which, on account of the jet black coloration of their heads are sometimes called hooded-monkeys, have a special word for "monkey" as distinct from all other animals, and not only a word for "food" but also special words for particular kinds of food like "bread," "apple" and "banana."

He even credited the capuchin with definite words for "danger," "friendship" and "love," and maintained that it indicates negation by an almost human shake of the head. These creatures, in Garner's opinion, enjoy long conversations and they not only borrow words from other monkeys, but studiously practice them until mastery is achieved. We must, however, credit the chimpanzee with great linguistic expressiveness, for laughter and weeping, anger and rage, as well as shades of desire and disappointment are partly vocalized, but gesture appears to be more important than vocalization. The mannerisms of the orator are less significant than those of this anthropoid.

The difficulty of interpreting ape sounds in terms of human sounds is enormous. Boutan, the zoologist, used the phonograph for recording the voice of the white-cheeked gibbon, *Hylobates leucogenys*, but found the task of representing the sounds by the letters of a phonetic system extremely hazardous. In this gibbon the sounds "hoc, houg, couag, and couaggac" express satisfaction while food is being taken. "Kouhi-hig-hiig" is a tender salutation rendered with rising lips and laughing mouth while "koc, kog-koug" is an expression of frank hostility uttered in the presence of a recognized enemy.

Though the views of Garner are discredited by many, they find one upholder in Yerkes, for many years a keen student of chimpanzee language. Yerkes also holds that this animal uses distinctive sounds to denote special objects or situations. His colleague, Mrs. Learned, could recognize over thirty distinctive sounds of this kind and in setting them out in a musical notation in "Chimpanzee Intelligence and Its Vocal Expressions," has given a most complete account of chimpanzee sounds.—Ed.

THE SPEED OF LIGHT

Light is supposed to move at the approximate speed of 186,000 miles per second. Is this speed constant?—U. S. T., Dallas, Texas.

Experiments show that the speed of light is not constant. Michelson's early experiments established the speed of light to be 186,284 miles per second. But later experiments show variations of twelve miles per second that cannot be accounted for.

What is more, light seems to travel in cycles or rhythms. One cycle follows the tides; another lasts fourteen days and eighteen hours; a third occupies about a year. At nine o'clock every night something threw the experiments out of gear. None of these irregularities were explained. The speed of light,

say Dr. Francis Gladheim and Fred Pearson, the assistants of Dr. Michelson, can no longer be regarded as constant.

Professor Einstein, whose relativity theory depends on the absolute speed of light, discounted actual importance of the discovery for physics, said it was probably the result of ground deformations. Harlow Shapely, Harvard astronomer, also looked at it from a geo-physical viewpoint. He pointed out that fourteen and three-quarter day rhythm is roughly one-half lunar cycle.

But these are makeshift explanations. The fact remains that physics has gotten a big jolt from the Michelson-Gladheim-Pearson experiment, and will have to do a lot of thinking to explain the discrepancies.—Ed.

ABSOLUTE ZERO IMPOSSIBLE

Several months ago I read, in your interesting department, SCIENCE QUESTIONS AND ANSWERS, that the attainment of the perfect vacuum was impossible. Can science reach absolute zero in temperature—or is that an impossibility, too?—S. M., Los Angeles, Calif.

The absolute zero of temperature is one goal, we are sorry to say, which science will never reach. As far as we know, present-day science will not be able to achieve the absolute zero of temperature, the point below which all molecular motion ceases, in the laboratory.

This point is approximately —273.1 Centigrade (—459.4 Fahrenheit). The neighborhood of absolute zero constitutes a strange, largely unexplored world of physical phenomena. It has already been possible to get down to a small fraction of a degree of absolute zero and eventually, physicists believe, it may be possible to come within a ten-thousandth of a degree. But there will always remain a forbidden realm which can never be penetrated.—Ed.

ULTRAVIOLET EVIDENCE

I know that X-rays are used for various purposes. They can be used, I'm told, to reveal whether diamonds are artificial or not. But can't X-rays be used to determine the ages of various organic objects, such as eggs?—B. L., Binghamton, N. Y.

You're half right. Eggs can be made to tell the truth about their age—but by exposing them to ultraviolet light, not X-rays.

The trick depends upon the phenomenon known as fluorescence. Ultraviolet radiation is itself invisible to the human eye, but it causes various substances to shine with light of different colors, or to fluoresce.

To the human eye an egg is just an egg. But under a beam of ultraviolet a really fresh-laid egg glows with a very pronounced red coloration. Less freshly laid eggs shade into blue, and the older they are the deeper the blue.—Ed.

CELLOPHANE

Exactly what is cellophane? How was it discovered?—O. N., Denver, Colorado.

Cellophane is a close kin of sugar wood, tri-nitro-toluene (better known as T.N.T.) and other powerful explosives. Cellophane is really transparent wood. The substance has had an interesting history. Its discoverer was a French chemist, J. E. Brandenberger, who tried to make tablecloths dirt-proof by coating them with a thin film of cellulose, the complex chemical which forms the basis

(Concluded on page 129)



CENTURIES hence, you may be able to keep your copy of **THRILLING WONDER STORIES** in your vest-pocket. For, scientists report, books and magazines may conceivably become obsolete, just as the volume of pages replaced the scroll of old.

Magazines of the future will be kept in little rolls of tape, not unlike movie film. The rolls of tape will record spoken words. And you'll be able to play this roll of tape on a sound-track. You won't have to read your fiction of the future. It will be read aloud to you, dramatized as vividly as your favorite radio show.

But what will they do for covers? We don't know!

THE MIRACLE ROAD

In 1884, Frank R. Stockton created a sensation in literary circles with his classic short story, "The Lady or the Tiger," a narrative which won wide attention because of the unsolved problem presented at its close. Since then the very title has become a common phrase denoting a dilemma.

In this issue, for the first time in scientific fiction history, we offer a modern version of "The Lady or the Tiger." Oscar J. Friend's story, **THE IMPOSSIBLE HIGHWAY**, by no means follows the pattern of the Stockton story, but it does pack a powerful ending . . . one that will keep you guessing!

We're offering prizes for the best letters explaining **THE IMPOSSIBLE HIGHWAY**. Won't you study the story and let us have your solution to this masterful story? We invite every reader to participate in this contest. Tell us who you think built the miracle road to nowhere! See page 88.

HARNESSING THE SUN

Coal and oil deposits will not last forever, and man is grimly preparing for the future. Did you know that science is getting the Sun to work for us—and that in coming years the Sun will supply the bulk of all our power?

A sun-power plant is in experimental use in Cairo, Egypt. The principle is the absorption and concentration of heat by means of parabolic mirrors which focus the heat on layers of water. The power from the plant is used to pump water for irrigation purposes.

And consider the vast reservoir of heat and energy the Sun offers. If it were possible to convert into power all the solar energy that falls on the United States alone in the form of sunshine, it would furnish 7,000 trillion horsepower daily!

OUR ARTISTS

If you've noticed, T. W. S. features the work of more scientification artists than any

other publication. Not only have we brought you the outstanding work of the veterans—Wesso, Paul, Marchioni, Brown, and Morey—but we have introduced four new great artists in the field of fantasy fiction—Finlay, Murphy, Schomburg, and Orban.

We think all these men are tops, and we intend to keep them busy working for T. W. S. and our companion fantasy publications. We'd like to know how you rate these artists—your favorites. We've held popularity polls on authors. Now tell us how the brush-wielders stack up. We'll publish the results, with comment, in an early issue.

THE "RADIO WAR"

When Orson Welles broadcast his nine days' wonder on October 30, 1938, the whole country fell for the "radio war." That is, most of the tuner-inners—except scientificion's followers.

For breathes there a fantasy fan who hasn't already read H. G. Wells' "War of the Worlds," the story on which the broadcast was based? Of course not! We've all read the story long ago. And of course we regarded the program merely as pure entertainment.

For the present, radio authorities refuse to allow fantasy broadcasts of future wars, fearful of a repetition of the Welles scare. In this connection, we believe that many of our readers will be interested to learn that Hadley Cantril, of Princeton University, has written a book, "Invasion from Mars," which discusses the entire Orson Welles broadcast, and analyzes the psychology of the average layman, explaining why people became frightened when they thought "the world would end."

It's a fascinating story, this document by Cantril, one that does well to defend scientification . . . and one that may win for us new fantasy stories on the air.

AMATEUR STORY CONTEST

Everyone's been participating in our amateur story contest! Have you sent us your first scientification story yet? T.W.S. still continues its national hunt for new stories by

new authors. It is the only scientifiction magazine publishing stories by its own readers!

Write up that pet interplanetary or time-traveling theme you've been hoarding, all these years before some other author scoops you on the idea. Type it up, double-spaced, and send it to **AMATEUR WRITERS' EDITOR, THRILLING WONDER STORIES, 22 W. 48th St., New York City.** Enclose a stamped, self-addressed envelope for the return of your manuscript should it prove unavailable.

If your story is a fairly good one, we will be glad to publish it in **T.W.S.** Prize stories are purchased at the same rates paid our regular staff contributors. We would like to present a new contributor as often as possible. Why not try for the honor?

Honorable mentions in last month's contest submissions are awarded to: Sam Moskowitz, Newark, New Jersey; Lynn Arckerd, 1703 Hewitt Ave., St. Paul, Minn.; and C. R. Bohi, 244 No. 7th Ave., Pocatello, Idaho.

STARTLING STORIES

Is there something new in scientifiction? We say yes, and offer **THE KID FROM MARS**, a complete book-length novel by Oscar J. Friend. This exciting novel, scheduled for the September issue of **STARTLING STORIES**, opens a brand-new vista in the realm of pseudo-scientific literature. You'll find excellent characterization plus strong suspense in this distinctive story of a lone Martian stranded on Earth!

The classic scientifiction story represented in the **HALL OF FAME** for the September **S.S.** is Benson Herbert's brilliant story, **THE WORLD WITHOUT**. It's a daring story of two scientists at bay with the unknown.

CAPTAIN FUTURE

No one has ever explored the weird Machine City of Mars. No one has ever roamed the Mistlands of Saturn. That is, no one but that strange band of star-rovers—the Futuremen! Prepare for the next issue of **CAPTAIN FUTURE**, wherein the red-headed Wizard of Science, together with Grag, the robot, Otho, the android, and Simon Wright, the Brain, explore the mysteries of Saturn.

THE TRIUMPH OF CAPTAIN FUTURE is the title of this fourth account of the exploits of the Futuremen—and it's a triumph for Edmond Hamilton, the author. Many other exclusive features and short stories in this issue!

JOIN THE LEAGUE

Have you joined our **SCIENCE FICTION LEAGUE**? It's an active, international organization composed of the world's most enthusiastic followers of science fiction—and it fosters that intangible bond between all scientifiction readers. Just fill out the blank provided on this page.

To obtain a **FREE** certificate of membership, tear off the namestrip of the cover of

this magazine, so that the date and title of the magazine show, and send it to **SCIENCE FICTION LEAGUE, 22 W. 48th St., New York City, N. Y.**, enclosing a stamped, self-addressed envelope.

And readers—write the editor of **THRILLING WONDER STORIES** a regular monthly letter. Tell us which stories you liked best, which are your favorite features and artists. Your suggestions and criticisms have made **T.W.S.** scientifiction's leading magazine. Help us maintain that leadership.—**THE EDITOR.**

New Members of the Science Fiction League

UNITED STATES

Dr. James Wright, Watonga, Okla.; Sam Goldeen, Jr., Berkeley, Calif.; Harry Schmar, Jr., Muscatine, Iowa; Rex Brumbach, Delehi, Ind.; Alfred H. Srock, Dearborn, Mich.; Willis Weaver, Baltimore, Md.; Frank J. Dudash, Cleveland, Ohio; Ginger Zwick, Orchard Park, N. Y.; Billy Young, Crosby, Minn.; John Hansen, Brooklyn, N. Y.; Robert Brown, Manchester, N. H.; Jim Hatfield, Jr., Wallace, Idaho; Arland Caswell, Toledo, Ohio; William Smith, Long Island, N. Y.; James La Rocco, Long Beach, L. I., N. Y.; Everett Wyers, Berkeley, Calif.; Leonard Westhoek, New Orleans, La.; D. T. Scott, Pearl Harbor, Territory of Hawaii; L. Ballerini, Chicago, Ill.; Milton F. Cooper, Compton, Calif.; David Bathke, Milwaukee, Wisc.; Mart Schemel, Algona, Iowa; John P. Baker, Springfield, Ohio; Howard Gaetz, Westwood, N. J.; Daniel M. Lipson, Cumberland, Md.; Ted Gray, Jackson, Ohio; Clifford E. Keeney, Agawam, Mass.; Bob Loper, Osgego, Kans.; Hren William, Milwaukee, Wisc.; Ernest H. Meredith, Los Angeles, Calif.; Allen Barton, Cos Cob, Conn.; Walter H. McKinney, Pottstown, Pa.; Victor Gotbaum, Brooklyn, N. Y.; Ralph K. Cummins, Cleveland, Ohio; Allen Elliott, Newport, Ky.; Burleigh Vancour, Hudson, N. H.; Douglas P. Duncan, Brookfield, Ill.; Herbert Wilson, Big Bear, Calif.; Eli Birnbaum, Brooklyn, N. Y.

FOREIGN

D. Whatley, Bromley Kent, England; Edward Goad, Toronto, Ontario, Canada; Patrick Murphy, Ottawa, Ontario, Canada; Robert Gilbert, London, England.

SCIENCE FICTION LEAGUE, 22 W. 48th St., New York, N. Y.

I wish to apply for membership in the SCIENCE FICTION LEAGUE. I pledge myself to abide by all rules and regulations.

Name (Print Legibly)

Address Age

City State

I am enclosing a stamped, self-addressed envelope and the name-strip from the cover of this magazine (tear off name-strip so that the name **THRILLING WONDER STORIES** and the date can be seen). You will send me my membership certificate and a list of rules promptly.

The Reader Speaks

MORE "VIA" STORIES SOON

By Stuart Chamberlain

This is the first time I have ever written to a magazine, even though I'm a rabid reader of S-F. I have been reading it for about two years and it's grown on me so that now I'm broke most of the time buying every magazine on the market.

I'll now try to give my opinion of your stories in the March issue.

First the cover: I think it is a little too lurid. Why is the sky red? To attract attention? I should think you could get it without so much red.

The best story was the "Time Cheaters." Perhaps I'm prejudiced as my favorite type of story is time traveling and it seems this type of story died down for a while but you are certainly bringing it back. To get back to the story, I think it was well worked out. I would still have liked to know what would have happened if the heroes hadn't brought back the weapon to defeat the Martians. Another thing, if the men forgot what they learned in the future when they came back to our time how come they didn't forget their knowledge of the present when they went into the future? Binder says, "Memory doesn't follow the time line" in The Story Behind the Story.

"Via Sun" was the next best. I like its style as it might be in a log. But I think Gordon A. Giles kills off too many of his characters by heroic deeds. It is all right at first but it soon gets tiresome. I should think he could work in his excitement some other way. I would like to have some more sequels and to have the secret of the pyramids solved. It's getting on my nerves.

3rd. "Perfect Murder" was a clever little short but it seems to me that if Random was killed at a young age he would never grow older to finally come back.

4th. "The Thought Materializer" was well worked out and was a type of story I like. The fact that the adventurer wasn't killed or went insane or something pleased me as that was the type of ending this kind of a story should have. So many authors wouldn't have given it this ending.

5th. "Renegade from Saturn" was rather slow moving, I thought, but I liked the idea of trying to figure out which fiend it was. The story didn't click with me, however, for some reason. I don't know why, even though I did guess the answer.

6th. "Worlds Within Worlds" was a rather dragged out affair, although the plot was fairly good. One thing I don't understand why: Sethi didn't destroy the cyclotron with his oscillator gun. He had thirty seconds. It says, also, that the soldiers marched steadily from the transmitting machine. How was it arranged? On Harl it would take about a half hour for a hundred soldiers to march into the mechanism yet on earth they came out at walking speed. If the hero had three

In this department we shall publish your opinions every month. After all this is YOUR magazine, and it is edited for YOU. If a story in THRILLING WONDER STORIES fails to click with you, it is up to you to let us know about it. We welcome your letters whether they are complimentary or critical—or contain good old-fashioned brickbats! Write regularly! As many of your letters as possible will be printed herein. We cannot undertake to enter into private correspondence.

days adventure in Harl in a wink of Earth time the men would come out of the machine all in a bunch. In order to have them come out at a regular speed on Earth they would have to be marched into the Harl end about a year apart!

7th. "Planet of Change" was a type of story I do not like. It was too short for its plot. I felt as if I was being shoved through it, and why should a man and woman fall in love simply because they had an adventure together? If it happened now and then in some stories it would be all right but it happens altogether too much. Romance does not belong in most stf. stories. I have read many fine ones without it.

I like SCIENTIFACTS very much. Its morsels of knowledge are interesting and educational.

I don't like "If". It is merely a mixture of drawings and suppositions thrown together in an unappetizing mess.

Your SCIENCE QUIZ is surely tough. I do better than average on all the magazines except yours. Keep it that way. I like them hard.

"Story Behind the Story" is a fine feature and makes the authors seem much more human. All in all, yours is a fine magazine. Keep up the good work.—742 Ethel Avenue, Van Nuys, Calif.

SQUAWKS

By Arthur L. Widner, Jr.

As long as I have entered the TREASURE HUNT, I thought I might as well include a short letter about what I think of T.W.S., since I haven't written for some time to THE READER SPEAKS.

Here is the criticism you asked for—going right through the magazine:

Cover—Reminds of when you first took over in 1936. Worm-monsters, in fact, any kind of living monsters are NG on the cover. Brown is a good artist, but the subjects are terrible. Feature Paul a little more often.

Interior illustrations: Still about the same. Marchionni will never be anything but mediocre unless he goes back to his style of around 1930. ("Warlords of Venus," etc.) Binder is still hazy and indistinct. His work is too frilly and overdone. Paul seems to be better than ever on the inside. All his illustrations were well done. An aching void is felt by no Finlay. Where did he go this issue? Also Wesso?

The stories: Nothing to rave about, by any means. If the Tarzan twins can't do any better than "The Lightning Men" they had better go back to the jungle and tell tales to the monkeys and baboons who might conceivably get a kick out of them. Unless of course, your general reader type is on a mental par with said monkeys and baboons. "Doom Over Venus" "The Great God Awto," and "True Confession" were the only ones even slightly palatable. Ed Hamilton, in spite of being a hack, has the knack of making a story seem real. I forgot about looking for elements several times while reading this tale, and had to go back and read several pages over.

The departments are O.K., except for THE READER SPEAKS which is much too small. Only a page and a half! And run of the mill letters at that. Don't any of the fans write interesting epistles any more—or are they all jabber like this one? I would like to get in touch with any SFL members living in eastern Mass. in regards to forming an SFL chapter. Anybody living within a radius of fifty miles from Boston, please write.—Box 122, Bryantville, Mass.

CAVE-MAN MANX COMING!

By Art R. Sehnert

You asked where we readers would like to have Pete Manx go in his next yarn. Well, here is my suggestion: Let Pete return to the day when man was yet unborn, the day when the dinosaur and pterodactyl roamed the Earth.

Let Gordon A. Giles have his boys explore Neptune. Give us more of the Carlyle-Quade feud, and more illustrations by Schomburg. Congratulations to Henry Kuttner on his adaptation of Dr. Cyclops. "Knight Must Fall" was about the best Pete Manx you've printed thus far. Let's see more of him.—791 Maury, Memphis, Tenn.

(Coming soon—Pete Manx in MAN ABOUT TIME, a story of the Stone Age. And VIA MERCURY, by Gordon A. Giles, the story of Mercury Expedition No. 1.—Ed.)

BOND BEST

By Alfred Edward Maxwell

Here goes a few lines on the current issue of THRILLING WONDER STORIES. Best story in the June issue is "Parallel in Time," by Nelson S. Bond. It was really excellent. I haven't read "The Sun-Maker" yet, nor read "Dr. Cyclops," though I have high anticipation of both.

The Pete Manx yarn was very good, and I would like to see him in the Stone Age or in the future. The latter would be good, in that Pete might use his historical knowledge to advantage, etc. "The Isle of Changing Life" was interesting. "Red Moon" had a nice start, but fizzled. "The Lunar Pit" was not bad for a last-place yarn.

All in all the issue was very good, and so far "The Sun-Maker" looks o.k. Why doesn't Giles put his men on Jupiter? But leave the pyramids alone!—Opelousas, La.

WILLIAMSON LEADS ISSUE

By David Glazer

The June issue of T.W.S. is the best this year, in my opinion. Jack Williamson's "The Sun-Maker" leads all the others by a wide margin. Pete Manx again nearly stole the show, placing second.

As for "Dr. Cyclops"—Not being Henry Kuttner's original story, I won't rate it. It reminds me of M-G-M's "Devil Doll," based on A. Merritt's novel, which was released about five years ago. Nevertheless, Kuttner's presentation was good.

Finally—I again plead—let Wesso do a cover!—12 Fowler Street, Dorchester, Mass.

DEPARTMENT SALE!

By Miles Eaton

You haven't heard from me for a long time but I'm still here, that is when I can scrape together 15¢ for a T.W.S. Also, I haven't seen any man-up-from-the-ape stories, so I guess we're all agreed that the only scientific method is to bring man out of a test-tube at some future date. Of course, if public sentiment says so, man-up-from-the-ape stories are definitely not scientific despite the fact that my grandpappy made his first scientific experiment by hitting two rocks together, i.e.:—energy plus energy equals heat.

I started out to suggest some new departments for our mag because I covet an original pen & ink by Finlay, as well as more departments. So here goes:

First—how about a check-up on who reads T.W.S., and why? If the silent ones are silent because no one would appreciate their enlightened comments on what makes cosmic rays tick, then it is time to pull them out of their shells by giving them meat to chew on. Conversely, if science's nearest approach to most of us is the taking of an alkaline tablet to neutralize the acid in our tummies, then departments are useless anyhow and we'd better stick to some other type of fiction.

(Continued on page 120)

TIRED ALL THE TIME?

Try Building Up Your Endurance
this Sensible, Easy Way



Lack your old pep? Feel down in the dumps?

Get little digestive upsets every few days? If there's nothing organically wrong with you—then it's more than likely SLUGGISH DIGESTION is to blame. It can make that gas and bloated feeling; can give you heartburn, a dizzy head.

Start your DIGESTIVE JUICES FLOWING NORMALLY again. Set Fleischmann's live Yeast to work on those digestive-juice glands. It's a STIMULATOR; it starts the sluggish juices flowing faster. In test cases the speed of digestion was greatly increased. Then you should begin to FEEL SWELL, look A LOT BETTER. Get Fleischmann's Yeast today. Eat one cake first thing in the morning, another cake half an hour before supper. Keep this up every day to help keep a good flow of digestive juices.

Write for "You Can't Feel Well If Digestive Juices Are Failing" to F. V. Co., Dept. Q-A, 695 Washington St., New York. Absolutely FREE!

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(Continued from page 119)

And then, having definitely ascertained that we are all doctors rather than dock hands, first Dep't. idea coming up—Most of us boys seriously need a list of where we can get materials for various experimental pursuits; names of manufacturers or dealers of such things as test-tubes, colchicine, metals for working, plastics, telescopes, formulae, etc. Included in this Dep't. should be publishers who sell popular-priced reference or textbooks of a specialized nature. We need a low price and varied equipment not in the toy class, but still not of technical application.

Most of us have a lot of junk lying around that we could utilize with proper equipment that we don't know where to buy. This collection of junk is evidenced by the multitudinous cameras, microscopes, books, relics, antiques, etc., generally needing repair that are listed in the swap column—but we don't know where to get them.

Another good Dep't. would be scientific experimental results, with each experimental reader contributing a short bit of his own research. For instance, I would like to know how to make black line zincs for home printing; I could volunteer information on how to make a telescope at home; someone else would wish to know how to grow plants without soil, or how to dissect a frog in four easy lessons.

In case the foregoing is nil, it would be interesting to begin Mr. Ed Hamilton's biography of the future and make the authors stick to it. As a start, I predict that the first rocket ship to the Moon was launched in 2114. That leaves somebody a lifetime to figure out how.

And if these don't click—as a last resort, I suggest that perhaps a plot Dep't. would help the stories. A substantial prize could be offered for the best science plot (climax must hinge on scientific fact). All submissions to become property of T.W.S. Then you folks turn the plot over to a good author and let him make a story out of it. The catch, of course, is that the plot must be built around a new scientific fact and must contain the necessary research; not just be laid in the future or on another planet.

If you care to publish this letter, you have my permission to delete any or all of it, but I would like to correspond with any nut on Ancient History, Pre-history, or Archaeology, also Folklore and mythology. If you're not a nut on the subject, don't bother me.—10835 NE Skidmore, Portland, Oregon.

GTW (Giving Wonder the Works)

By Carl H. Anderson

Sitting here in the lobby waiting for my traveling partner who is already a half hour late, I finally decide that a certain ghastly situation can go on no longer. Read my list of grievances and then, I implore you, do something!

Covers—Utterly and supremely wretched. Feb. '39 is the last one that was fit to be seen anywhere but out behind the woodshed. Leering monstrosities! Corny situations! Bug-eyed monsters! Shades of the SFTPO-BEMOTCOSFP! Is that glorious cause to be totally lost? Fling Brown to Nepenthe Splendens! Forget him. Or, (impractical thought) reform him. But somehow, contrive to erase those hideous, nightmarish, horrific, reeking, pop-corny covers! All the fine stories and high-grade interior art-work you could buy wouldn't counteract the effect of those abominable outer jackets.

General Format—Tear off the cover and the remains are fairly acceptable. And if you ever consider changing the title type, switch to the heavy, uniform lettering as in the ad for Williamson's story on page 116 of the May issue. That looks very good. And I can do with rough paper perfectly—as long as it's white. Yes, I mean that May issue again!

Art—Better than some bags, although the wheel-horse, Wesso, seems to be slipping again. And how grand it is to see Paul back. He still can't draw people but his machines and aliens are as good as ever. Suggestion—

I can't resist gouging at old wounds—put him on the cover as in days of yore.

I don't like the mazes of apparatus that Marchioni peppers through his work. Where does he think he is—in the funny papers? Schomburg has the same fault. Look, if you dare, at the page and a half that he did for "The Lightning Men" in the Feb. issue. But that isn't a fair indictment—the idea that he had to work was something to make even me flinch—seasoned sf veteran that I am. Contrast this piece of hokey with his clever and imaginative interpretation for "Secret of the Cyclotron."

I realize that Finlay is very busy, but continue getting him occasionally for novel book-jackets. So; this all boils down to Paul, Finlay, Schomburg and Wesso when he's right.

Stories—Look at the first three issues of '39. Yarns like "Flight of the Starsheil," "Jules Verne Express," "Experiment," "Dawn of Flame," "The Ultimate Catalyst," "Passage to Saturn," and "Robot Nemesis." Man alive—where in the first half of this year can you find stuff to beat that? We have had good stories, yes; "The Time Cheaters," "The Day of the Conquerors," the "Via" series, "Beauty and the Beast," Pete Manx, and your last two amateur yarns. Good enough.

But they sing mighty small against those of last year. And oddly enough it is the same group of writers who are still working for you; still producing. Why aren't they as good? You've got me. Pressure, maybe. They're trying to write too much.

A case in point is Wellman. When he slips to the stage of the "Einstein Slugger" and "The Planet of Change," something is definitely wrong. He must have been working too hard on "Twice in Time," which was a really fine story.

But next month looks more promising. F. B. Long coming back. He is never poor at least, and often above average. Pete Manx, the redoubtable, is in view. And Kuttner's story may or may not click, depending upon whether or not he drags in Tony Quade under another alias. Williamson, naturally, is always tops; in fact his novel could be just the thing you need to put you back on your feet. It can be done—I'm sure of that. But whether or not you do it is another thing.

Features—Generally good, although in IF Binder apparently strives more for sensationalism than logic. SCIENTIFACTS is good. Keep it.

SCIENCE QUIZ is so thorough that it gives signs of involving more research than it's worth. Most of the fans I know, including myself, rarely bother much with it at all. A good short article by an authoritative writer would be better. Or even an extra two pages of fiction.

The Reader Speaks—Compared to the other reader-blatt columns yours is thoroughly banal and juvenile. No knocks that aren't cautiously balanced by a slushy compliment; no fan-arguments; no feuds; very little competent or constructive analysis; floods of cozy little letters just oozing with naive balloon-juice which the writer seems to think is necessary to get his letter printed.

You've even got a guy that gurgles in Martian, so help me, but this apparently makes little difference, for, when speaking English, he still uses phrases like "all the luck in the Solar System," "my favorite science fiction mag," "in my estimation" and "from my point of view," all too coyly and often in the wrong places. O sad World! My kingdom (40 million acres of Venusian swamp) for a drop of initiative, for a molecule of self-assertion, for an atom of dare-deviltry once more in THE READER SPEAKS.

Nothing sensational in the May issue. Kuttner is apparently in the ascendency here, with "Seven Sleepers." There are rather obvious traces of his "goulish plot" in this; that is, a string of disconnected incidents that build up into a nice amount of wordage.

"Gems of Life" was a typical Binder story, not bad, not super, and "Tomorrow's Hero" sort of limped along. Tracy was working a well-nigh exhausted vein there. Brady's short dragged a little at first—but at least he knows words of more than two syllables.

Well-written, it had a jolting conclusion such as you rarely see. The best of your amateur yarns. More by this guy.

I am about through with you now, Ed. In passing let me remind you of what I said about the covers, and allow me one trite phrase of my own:

I dare you to print this.

I have spoken.—Hotel Perry, Petoskey, Michigan.

(Well, readers, Mr. Anderson pans you guys, too. So we're in good company. Send in your letters and answer this man!—Ed.)

ASTEROIDS NEXT?

By Edgar Gilbert

Enclosed you will find the coupon from page 12 of the current THRILLING WONDER STORIES regarding the science-fiction booklets, and also 25¢ for a set of them. I think that this booklet idea is a very good one, and I hope you will print more such sets in the future.

Regarding your suggestion about series stories, I like especially the "Via" yarns and the Pete Manx stories. It seems to me that the asteroids would make a good locale for one of Giles' stories. The expedition could perhaps find evidences of a civilization which existed on the mother planet before it was blown up—perhaps even the civilization he has been hinting at in the stories thus far. Why not send Pete Manx to the future? His trying to match his wits against people who know as much as he does should make a good story.

Just a thought: three or four years ago, I saw a suggestion by a reader in a science fiction magazine that I thought was a good one, but nothing was ever done about it. It was that you have one of your artists draw up a set of plans for a model (imaginary) rocket ship and print it in your magazine.

You seem to have received quite a number of suggestions regarding contests. My suggestion is, why not start one of the contests? —2145 Avenue L, Wichita Falls, Texas.

A TIP FOR KENT

By Bill Adams

I have just finished the June issue of T.W.S., and deemed as the best story, "Parallel in Time," by Bond. This is the first time that I figured a short story better than the complete novel in one of your magazines.

Incidentally, I take back my remark about Bond that I made in my last letter. If he continues to put out more stories like "Parallel in Time," and less like "Prisoner's Base," he will have my whole-hearted support.

Next, of course, comes "The Sun-Maker," by Williamson. While a very good story, and better than the average in any other magazine, it seemed to let down a trifle on the high standard you had set for your main novels. I expected a little more from Williamson. Maybe I am wrong in expecting a classic in each issue of your magazines.

"Knight Must Fall," by Kent, runs third in my estimation. I have found every one of the Pete Manx stories both interesting and amusing. How about having Manx visit the "Gay Nineties" next? That era, while not having a glamorous history like King Arthur's time, would present some amusing scenes, however. The Marco Polo era would have some interesting possibilities, too.

"Red Moon," I suppose, should come next. The idea, while not new, was well-written, and I thought the form of Martian life was a good one, also. A little too much love, however.

Next, "The Isle of Changing Life," by Hamilton. I don't know whether Hamilton originated this idea or not, but it was new to me.

I suppose "Dr. Cyclops" should come next. I have not yet seen the movie, but I received the impression that Kutner rushed through the tale too fast. I'll wager he ruined an opportunity for a better story than he made out of it, didn't he?

(Concluded on page 128)

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THE STORY BEHIND THE STORY

CAN fictional characters emerge from the shadowy realm of the imaginary and materialize as full-bodied individuals? Don't say no. We remember a swell fantasy, published several years ago, about an author who created a character that was so vivid, so animate, that millions of readers imagined the character as being alive. The story went on to tell how the vast concentration of millions of minds actually brought about the materialization of the author's character in flesh-and-blood form.

Of course, that was purely fantasy. But many of fiction's great characters do seem real and alive, not lifeless figures. Tarzan of the Apes, Sherlock Holmes, Robinson Crusoe, Hamlet, and others, will remain immortal in the minds of man, as alive and kicking as any human being who ever breathed Earth's oxygen.

We feel as strongly about Eando Binder's popular character, Anton York. When Anton York apparently met death in a recent novel, "The Three Eternals," hundreds of readers from all parts of the country wrote us demanding that the scientist be brought back to life.

For Anton York, the immortal scientist, has won for himself a permanent niche in science-fiction's Hall of Fame. Anton York represents the centuries to come. He is the wizard of science, the master, the idealist we all dream about. And if you require further conviction as to the genuineness of this great character, listen to Eando Binder, his creator, who authored this month's feature novel, **THE SECRET OF ANTON YORK**. Binder has done an excellent job by way of proving that Anton York is immortal!

I was sitting in my room, reading, when Anton York walked in. He walked in through the wall, which is one of his milder forms of scientific jugglery. I said hello, and he said: "I've just read the latest issue of **THRILLING WONDER STORIES**, which I read constantly no matter what corner of the Universe I'm in. I notice you erroneously gave the readers the impression that I was destroyed, in my encounter with the Three Eternals. Luckily, you said 'vanished' instead of 'destroyed'. But you'll have to be a little more careful, Binder, or I'll get someone else to jot down my adventures."

"Sorry," I gulped. "But then, eagerly, I said: 'You're just the man I want to see. Anything exciting happen recently? Something I can make into a story?'"

"Story?" For the first time, I saw a spark of anger in those glowing, immortal eyes of his. "How many times must I tell you my adventures have actually happened? I've come back through time, to the year of my birth, to reveal these things. Things that will happen. And all you think of is in terms of stories with which to titillate the imagination of your readers!"

"Still," I said gently, "you are a myth, Anton York. It's the only way I can present you. No scientist of today would believe you actually exist."

Anger left his eyes.

"I suppose you're right," he sighed. "I belong to that mythological troupe who've played history's stage, and whose one-time reality faded into the mists of antiquity—or futurity, in my case. Cyclops, Jove, Robin Hood, Paul Bunyan—

and Anton York. We're all ghosts, too amazing to be believed. Do you know that in 10,000 A.D., the historians of that time will gravely deny that Thomas Edison ever existed? They will say that he is a personification of the inventive spirit of ancient America, and that no one man could have invented all he is credited with?"

He shrugged, in a pathetic sort of way, then resumed:

"But to get back to your question. Yes, something exciting did happen—"

(I already had pencil and notebook ready.)

"After my encounter with the Three Eternals, I ran into a situation that even to me seems incredible. In fact, at times, Vera and I swear we dreamed it all."

"It involves Earth?" I asked hopefully. "Not some sector of space and time the readers wouldn't have the slightest personal interest in?"

"Yes, it deals with Earth."

"It took place when and where?"

He looked at me with a peculiar smile. "It took place as far from Earth as you could conceive. Several eternities removed in time, and unthinkable distances in space. The last world!"

I put my pencil down, shaking my head. "Then it doesn't involve Earth. Hell of a joke to play on me, York!"

"Joke?" Again that peculiar smile. "It involves Earth, I say, though all the while Earth was farther away than the remotest galaxy. Now listen—"

When he was through, I was trembling. "I don't believe it!" I gasped. "Not a word of it."

"Just step in my time-car," he invited. "I'll take you there and offer absolute proof."

He took my hand, but I shrank back. And I was pale. It's one thing to write about those adventures, another to join them. I prefer the vicarious method. He grinned, said "so long," and vanished.

I still don't believe it. Read it and see if you do. We both agree it's utterly fantastic, don't we? That it should start—"Once upon a time—"

But then there's Thomas Edison, who in 10,000 A.D. will be a myth, and all his doings the naive imaginings of the unenlightened, witch-believing ancients of 1940 A.D.

Hope you like the story.

THE MARTIAN MIDAS

IS there anyone who hasn't yearned for the golden touch—the ability to transmute base metals into gold? The gift isn't all it's cracked up to be, as Manly Wade Wellman tells us in his novelet, **THERE WAS NO PARADISE**. It's a poignant story of one Martian against all Earth.

The idea that touched me off on this adventure of a visionary Martian on our very cynical planet may have occurred to many another writer of science fiction—the possibility that inhabitants of other worlds have their science fiction about Earth. Even Kipling, in his long poem addressed to the Romantic Principle, had that fancy:

*Beyond the bounds our staring rounds,
Across the pressing dark,
The children wise of outer skies
Look hitherward and mark
A light that shifts, a glare that drifts,
Rekindling thus and thus—
Not all forlorn, for Thou hast borne
Strange tales to them of us.*

And probably the viewpoint of Martian, Jovian or Venusian toward Earth is quite as romanticized and idealized as any story we write of them.

Uol, my Martian explorer, may seem Quixotic—set it down to my admiration of Don Quixote. And I am quite convinced of the shortcomings of my fellow-creatures, as presented here. If this be propaganda or editorializing, make the most of it.

THE ROAD TO NOWHERE

PLEASE do not read Oscar J. Friend's Story Behind the Story for his brilliant yarn, THE IMPOSSIBLE HIGHWAY, until you have studied the story. That's a sincere request on our part, for as you read THE IMPOSSIBLE HIGHWAY, uninitiated, unaware of what is to come (just as we did), you'll wonder as you've never wondered before how the story will end, what will be the explanation.

And then, of course, you'll be eager to enter the unique contest we are sponsoring in connection with this remarkable story. It's a story that poses a mystery—and only you can supply the answer!

And now, assuming that you've read the story, listen to Oscar J. Friend's amazing confession—that he himself doesn't know the explanation for THE IMPOSSIBLE HIGHWAY:

THE IMPOSSIBLE HIGHWAY springs definitely from two sources—maybe more, for puzzling indeed are the labyrinths of the human mind. Anyway, out in the Southwest I've seen short stretches of different types of highways laid as test roads. In fact, I've seen plenty of that sort of thing in our Eastern cities, too, but it was out in my own old stamping grounds that the idea hit me particularly, and I started day-dreaming about trails that went nowhere, unexplained stretches and fragments of roads, and how arteries of transportation are so inextricably tangled up in the history of civilization.

There are the old Roman roads—example; the Appian Way which is still in use in Rome. I recall a bridge that was built across one of our winding Southern rivers at great expense, and by the time it was completed, the river had cut a new channel—and was flowing across behind the bridge. In one of the old Oz stories by L. Frank Baum a character was selling stretches of road. A customer bought so much of it, he clipped it off, and before he knew it the customer was tumbling and rolling through space to be spilled out at the end of the piece of road—in the midst of a fantastic adventure.

In short, all these things went together in my muddled head to give me the impression of a strange road. And who with the heart of a true adventurer and explorer hasn't felt the magnetic pull of a strange or enchanting-looking road?

Well, there was my road. But, intriguing as it might be to me, it would mean nothing to others through the cold medium of the printed word. So I had to people my road with something, imbue it with a purpose, make it symbolic of life, provocative of thought. And about this time I picked up a copy of Donald Peattie's "Flowering Earth". After I read that book all my interest in and knowledge of the unending cycle of life returned to me.

For one thing I recalled funny incidents in the battle of evolution versus the stand-patters. The Scopes trial in Tennessee. The unyielding religious front. And others. But funniest of all was a two-page spread I recalled in a science magazine, showing the tree of life with the various offshoots of the different branches as encircled drawings of types of fauna. At the top of this branching tree was a circle containing the bust portrait of a man, Nature's highest type of evolved being. The subtlety of the joke was that it was picture of William Jennings Bryan, the fundamentalist.

But all that is neither here nor there. I've secretly thought all along that Bryan was not as obdurate as he pretended to be when he locked horns with the late Clarence Darrow in the Scopes monkey business. I've thought that he knew more about evolution than he wished to proclaim, and that he simply opposed it—as generally presented—not because he didn't believe in it, but because he didn't want to see the crutches kicked out from under the uneducated and deeply religious person who couldn't reconcile evolution to his religion.

(Continued on page 124)

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(Continued from page 123)

To me, evolution is proof positive of the infinite purpose beyond man's conception. Be that as it may. It is a scientific fact that the blood of animals is astonishingly akin to the sap of plants. Yes! Simply exchange an atom of iron in the hemoglobin of blood for one of magnesium in plant sap, and you have a liquid which is startlingly similar to the other.

So evolution seemed to me to be the logical theme of that stretch of impossible highway. And I put it there as a sort of fugue. I tried to show the parallel between plant and animal life, to point out the real kinship between all forms of life, animate and inanimate, sensate and insensate—if, indeed, any form of life can truthfully be called insensate. Anyway, it's incorporated there. Whether or not I've done a good job, the readers will say.

As for me, I am deeply intrigued with THE IMPOSSIBLE HIGHWAY, and I am silly enough to wish I could travel along it as did Nelson and Mackenzie. You see, that pair of men had already been delving into the mysteries and complexities of life, and I am thinking strongly of digging back into some of their previous adventures and sifting the findings to see what other queer things they ran into in the biological field. Who knows, I may unearth material which will throw light on the inexplicability of THE IMPOSSIBLE HIGHWAY.

TOMORROW'S BATTLEFIELD

THIS month's cover story, **NO MAN'S WORLD**, by Henry Kuttner, is based squarely upon present-day history. Opposing European nations, eager to avoid destruction of their centers and homes, are seeking to battle out their differences in some new territory—a **No Man's Land**.

Suppose beings from alien dimensions were at war with each other. It's not too fantastic to assume that they would adopt similar tactics. What better than to battle it out on innocent Earth, the poor bystander? That's why Henry Kuttner calls our planet—**NO MAN'S WORLD**.

Recently the film, *The Lost World*, was revived at a little New York theatre. It was still a technical triumph, and the shots of the prehistoric reptiles had lost little of their original effectiveness. I saw the picture in company with a war correspondent who had just returned from Europe, and, after the show, we spent some time discussing it in the club of which he is a member. From there the conversation drifted to his own recent experiences. He showed me some unreleased photographs he had taken, during the first World War, and I recall vividly the horrifying shots of No Man's Land.

After I left him, I couldn't get the memory of those pictures out of my mind. I tried to. I needed a plot for a story, but the only thing that occurred to me in that regard was a scene in *The Lost World* in which a dinosaur was seen charging toward the camera. Suppose the creature had actually emerged from the screen, into the theatre? Well, that was an idea.

I went home and plotted the tale. I worked in all the details and then wrote an entirely different story. The only trace of the original was the situation in which unearthly creatures emerge from a motion picture screen. The story itself isn't the one I plotted; it's the one I had to write, after listening to the war correspondent's story and seeing his photographs of No Man's Land.

Some may contend that a story of this type has no place in a science-fiction magazine. I do not agree. The very nature of science-fiction makes it one of the best fictional vehicles for putting across an idea, a "message," or a theme. Plenty of magazines, of course, hesitate to run "off-trail" stories—and I am glad, therefore, that **THRILLING WONDER STORIES** has no hide-bound formula, but allows their authors latitude to write of what they choose. Whether or not my yarn is a good one is another matter, but I hope the readers will find it interesting.



BEST FUN, FICTION AND FOTOS IN

THE NEXT ICE-AGE

THE discovery of the planet Neptune was hailed by all astronomers as a great event. The sighting of Pluto, the ninth planet, was a triumph for Percival Lowell. But all astronomical discoveries aren't good news. As in the case of Ray Cummings' novelet, ICE OVER AMERICA, wherein a new asteroid upsets Earth's gravitational applecart.

The editor of THRILLING WONDER STORIES has asked me why I wrote *Ice Over America*. We all write for money. That is a sordid, horrible truth. And so you might say I wrote *Ice Over America* so as to sell it, and you wouldn't be far wrong.

But that wasn't my only reason, of course. We all write for the pleasure of self-expression, and the satisfaction of getting the writing published. With publication comes your ability to bring pleasure to others. There is a satisfaction in that—a very big satisfaction.

And publication also, I think, is the real test of whether you have written a thing worthwhile, or not. There are some writers in Greenwich Village—and of course, many other places—who publish everything they write in their bureau drawer or an old trunk, after the editors have demonstrated that they are not smart enough to see its merit. But all you readers, somehow or other, seem to get along all right without ever realizing what you have missed. I'm sorry about that. As a matter of fact, some of the very finest stories I've ever written are denied you, because they are far too good for even the editor of THRILLING WONDER STORIES to appreciate. So you are getting along without them. I'm sorry; I apologize, but I just don't see what I can do about it.

Specifically about *Ice Over America*—what the editor really meant was how did I happen to write that story, rather than something else? Inspiration—if you want to call it that—comes in queer ways. Personally I think it's largely coincidence—the queer outsprings of one idea from another, for no particular reason whatsoever.

My father looked like Mark Twain. If he hadn't, quite conceivably I would never have written *Ice Over America*. So if you like the story, you have my father to thank. And of course, his mother and father and all his ancestors.

The connection is simple. Because he looked like Mark Twain—so much so that people often stopped him on the street—he used to talk a lot to me about Mark Twain—and he often used to quote to me the great writer's sayings. One of them which pleased my father very much, so that he repeated it upon every occasion, went something like this:

"Everybody complains a lot about the weather, but I don't see that anyone ever does anything about it."

I was brought up on that. To my father it seemed to embody a great and helpful philosophy. Which, if you come to think of it, perhaps it does.

So the day when I was destined to start writing *Ice Over America*, I was browsing for a plot, with not the slightest idea in my head of anything. I happened to think of my father—of Mark Twain—of that crack about the weather—and why shouldn't I write about somebody who did something about the weather, if only to prove that Mark Twain was wrong.

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THE READER SPEAKS (Concluded from page 121)

"The Lunar Pit" was just an interesting space-filler. It runs almost neck and neck with Kuttner's "Dr. Cyclops," however. I always enjoy a story when rocket ships were just coming into being better than I do a story when rocket ships are just commonplace acceptances. It was this which served to make "The Lunar Pit" an interesting story.

By all means continue your "Via" stories. Have Gordon A. Giles select Mercury for his next locale. Very few stories have been written about this little planet.

Yes, definitely I want the Carlyle-Quade feed continued, but not in the special novel section. Reserve it for more stories like "Roar of the Rocket."

That'll be all, except please make CAPTAIN FUTURE at least a bi-monthly.—P. O. Box 115, Santa Anna, Texas.

A SALUTE TO MURPHY

By Wallace Buckley

I have been haunting the newsstands for days just to buy the latest copy of T.W.S. I heard about the story "Dr. Cyclops" and thought it would be one of the best s-f stories I had ever read. What a disappointment! The story was good, but not up to Kuttner's par or my expectations.

"The Sun-Maker" takes first; who illustrated it, anyway? Was it one of your old artists with a changed style or a brand-new one? (The artist was Frank Murphy, who illustrates for our companion magazines.—Ed.)

Pete Manx takes second place, but only because of the humor. I don't care what anybody says, I still like humor in science fiction. This Kelvin Kent really has a character here.

Nelson Bond is one of the best new authors in s-f. I hope he is not just a flash in the pan. "Parallel in Time" takes third.

The rest of the stories were so-so. "Dr. Cyclops," fourth; "Red Moon," fifth; "Lunar Pit," sixth; "Isle of Changing Life" gets last.—330 Spaulding Ave., Ripon, Wis.

"SEVEN SLEEPERS" TOPS IN SERIES

By Konrad Wm. Maxwell

I was truly surprised today to turn to the Readers' column and find my letter there—never expected to see one printed. However, I write this letter and ask you to please print it in order to correct a slight mistake your printer made in setting the type. You see you put me about a thousand miles away from home. (Giving my address as New Jersey when I really stay down in the sunny south.) Not that I dislike New J. Don't get me wrong—it is a grand little state, but if some fans write that address they will not get an answer and think me a snob, which I pray that I am not.

As long as I write I may as well say what I think of the "Seven Sleepers" issue. It was great! I list the stories as follows:

(1) "The Seven Sleepers" . . . Better than any other Gerry Carlyle story and possibly one of the best science tales ever published. I really liked this one, and I don't mean maybe. (2) "Dictators of Creation" . . . One of Hamilton's best stories. Rates three bells . . . four silver chimes and a mile-long parade, with confetti-tossers.

(3) "Tomorrow's Hero" . . . Something unusual! Something new! Interesting and enjoyable. More future tales like this, please. (4) "Prisoner's Base" . . . Excellent, but has to take fourth place simply because the others are too good. It was full of humor and made a fine story.

(5) "Gems of Life" . . . It was fair, but not equal to the others. (6) "Dosage" . . . A good amateur story. Far better than average.

Well, so much for the stories. If I may repeat, after reading this issue—THRILLING WONDER STORIES is still leader of the field!—648 South Main Street, Opelousas, La.

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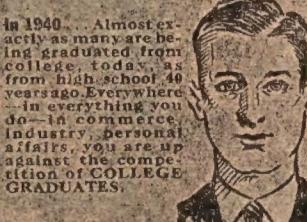
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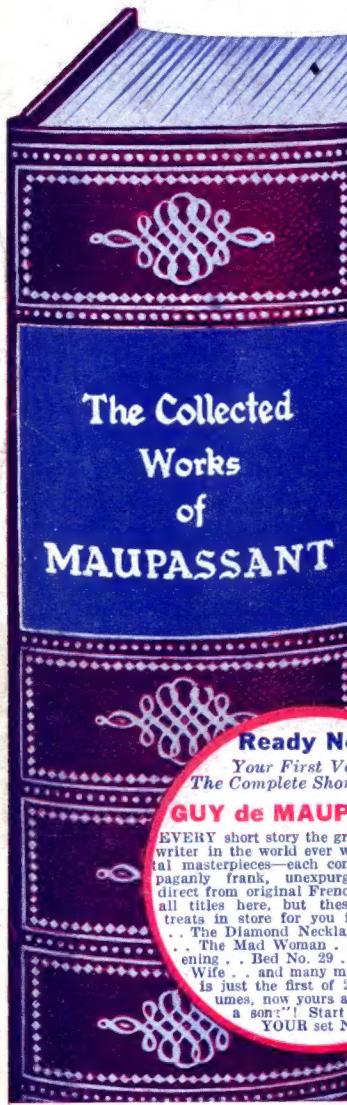
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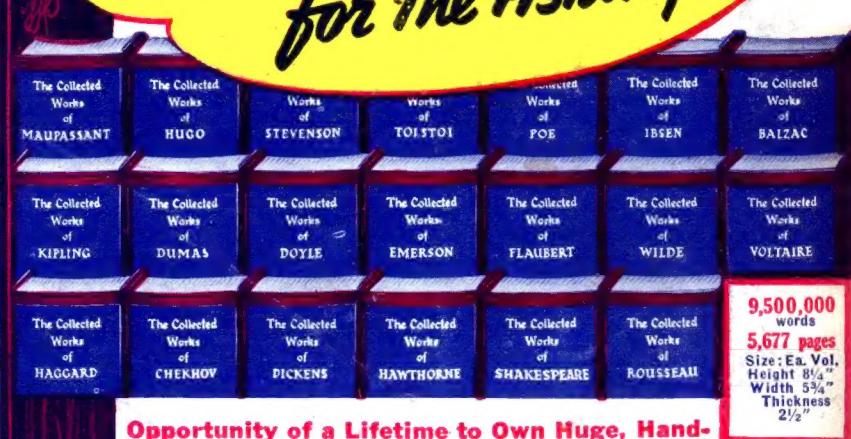
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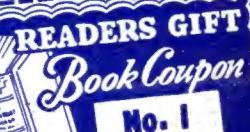
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